



CLASS 1

MODIFICATION

8/21/09

**TABLE OF CONTENTS
VOLUME I**

Section	Page
6 PLAN REVIEW AND LICENSING STANDARDS	
Chapter NR 680	
6.1 Local Approvals - NR 680.06(1)	6-1
6.2 Submission of Reports – NR 680.06(2)	6-1
6.3 General Contents of FPOR – NR 680.06(3)	6-2
6.4 Facility Specific Requirements – NR 680.06(4)	6-3
6.5 Environmental Review – NR 680.06(6)	6-3
6.6 Needs – NR 680.06(8)	6-3
7 CURRENT FACILITY OPERATIONS	
7.1 Site Description	7-1
7.2 North Drum Storage Warehouse Description	7-1
7.3 2007 Warehouse Addition Description	7-2
7.4 2009 Lab Pack Building Description	7-4
7.5 Lab Packing Operations	7-7
7.6 Bulking Activities	7-7
7.7 Fuel Blending Activities	7-8
7.8 Storage/Transfer Activities	7-10
7.9 Aerosol Can Puncturing	7-11
7.10 Non-Hazardous Waste Operations	7-11
7.11 Approval Procedure	7-12
7.12 Receiving Procedure	7-13
7.13 Rejection Procedure	7-14
8 COMPLIANCE WITH CHAPTERS NR 664 AND NR 679	
Chapter NR 664	
8.1 General Facility Standards (Subchapter B)	8-1
Identification Number – NR 664.0011	8-1
Required Notices – NR 664.0012	8-1
General Waste Analysis – NR 664.0013	8-1
Security – NR 664.0014	8-2
General Inspection Requirements – NR 664.0015	8-3
Personnel Training – NR 664.0016	8-5
General requirements for ignitable, reactive or incompatible wastes – NR 664.0017	8-6

Section	Page
Location Standards – NR 664.0018	8-7
Construction Quality Assurance Program – NR 664.0019	8-7
Construction Certification for a New Facility – NR 664.0025	8-7
8.2 Preparedness and Prevention (Subchapter C)	8-7
Design and Operation of Facility – NR 664.0031	8-7
Required Equipment – NR 664.0032	8-7
Testing and Maintenance of Equipment – NR 664.0033	8-8
Access to Communications or Alarm System – NR 664.0034	8-8
Required Aisle Space – NR 664.0035	8-8
Arrangements with Local Authorities – NR 664.0037	8-9
8.3 Contingency Plan and Emergency Procedures (Subchapter D)	8-9
Purpose and implementation of Contingency Plan – NR 664.0051	8-9
Content of Contingency Plan – NR 664.0052	8-9
Copies of Contingency Plan – NR 664.0053	8-10
Amendment of Contingency Plan – NR 664.0054	8-10
Emergency Coordinator – NR 664.0055	8-10
Emergency Procedures – NR 664.0056	8-11
8.4 Manifest System (Subchapter E)	8-12
Use of Manifest System – NR 664.0071	8-12
Manifest Discrepancies – NR 664.0072	8-12
Operating Record – NR 664.0073	8-13
Availability, Retention and Disposition of Records – NR 664.0074	8-14
Annual Report – NR 664.0075	8-14
Unmanifested Waste Report – NR 664.0076	8-14
Additional Reports – NR 664.0077	8-14
8.5 Releases From Solid Waste Management Units (Subchapter F)	8-15
8.6 Closure and Long-Term Care (Subchapter G)	8-15
Closure Performance Standard – NR 664.0111	8-15
Closure Plan; Amendment of Plan – NR 664.0112	8-15
Closure; time allowed for closure – NR 664.0113	8-16
Disposal or decontamination of equipment, structures and soils NR 664.0114	8-17
Certification of Closure – NR 664.0115	8-17

Section	Page
8.7 Financial Requirements (Subchapter H)	8-17
Cost estimate for closure – NR 664.0142	8-17
Financial assurance for closure – NR 664.0143	8-18
8.8 Containers (Subchapter I)	8-18
Condition of Containers – NR664.0171	8-18
Compatibility of Waste with Containers – NR 664.0172	8-18
Management of Containers – NR 664.0173	8-18
Inspections – NR 664.0174	8-18
Containment – NR 664.0175	8-19
Special requirements for Ignitable or Reactive Waste NR 664.0176	8-19
Special Requirements for Incompatible Wastes-NR 664.0177	8-19
Closure – NR 664.0178	8-20
Air emission standards – NR 664.0179	8-20
8.9 Air Emission Standards for Tanks, Surface Impoundments and Containers (Subchapter CC)	8-20
Standards: containers – NR 664.1086	8-20
8.10 Standards for Used Oil Generators (Subchapter C)	8-23
Applicability – NR 679.20	8-23
Hazardous Waste Mixing – NR 679.21	8-23
Used Oil Storage – NR 679.22	8-23
On-site burning in space heaters – NR 679.23	8-24
Off-site Shipments – NR 679.24	8-24
8.11 Standards for Used Oil Fuel Marketers (Subchapter H)	8-24
Applicability – NR 679.70	8-24
Prohibitions – NR 679.71	8-24
On-specification used oil fuel – NR 679.72	8-24
Notification – NR 679.73	8-24
Tracking – NR 679.74	8-25

radiant heat, etc. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable storage areas. Badger Disposal does not mix incompatible wastes. Materials stored in the lab pack building will be separated by containment. It is Badger's policy not to allow smoking except in designated non-operational areas such as office areas. Badger has "No Smoking" signs in highly visible areas of the facility and main entrances.

2.10 Locational Standards – NR 630.18

The Badger Disposal facility is located in a primarily industrial area within the city of Milwaukee, Wisconsin, at a location east of the intersection of West Hemlock Street and 60th Street. The facility address is 5611 West Hemlock Street, Milwaukee, Wisconsin. The geographic coordinates of this locations are north latitude 43°09'4.2552" and longitude 87°58'53.9364".

The legal description for the site at 5611 W. Hemlock Street is :

All of lots 9 and 10 in block 1 of Megal Good Hope Industrial Park, and parcel 2 of certified survey map No. 6287, Being a part of the southwest ¼ of the Southwest ¼ of Section 14, Town 8 North, Range 21 East, in the City of Milwaukee, Milwaukee County, Wisconsin, bounded and described as follows: Commencing at the Southwest corner of said ¼ section; thence N00°28'43"E, 872.59 feet, thence N88°21'38"E, 545.03 feet to the point of beginning; thence N01°39'52"W, 233.28 feet to the southerly line of West Hemlock Street; thence N88°20'08"E along said line, 200.00 feet; thence 33.44 feet along an arc of a circle whose center is to the right whose radius is 39.66 feet and whose chord bears S67°30'20"E, 32.46 feet; thence 88.62 feet along an arc of a circle whose center is to the left whose radius is 50.00 feet and whose chord bears N85°52'19"E, 77.47 feet; thence S45°47'02"E, 153.00 feet, thence S01°39'52"E, 23.68 feet; thence N88°21'38"E, 93.97 feet; thence N44°08'26"E, 243.97 feet to the southwesterly right-of-way of the Union Pacific R.R. Co.; thence S49°00'26"E along said line, 150.88 feet; thence S00°25'51"W, 158.05 feet; thence S88°21'38"W, 787.60 feet; to the point of beginning.

The property on which the Badger Disposal facility is located covers approximately four acres.

2.10.4 Property Line

A drawing depicting the legal boundaries of the property on which the facility is located is included in Section 7, Attachment B – Badger Disposal – Current Operations Drawing #05490-OV1.

2.10.5 Fault Line

The Badger Disposal facility is not located within 200 feet of a fault which has had displacement in Holocene time.

2.11 Additional Facility Standards – NR 630.20**2.11.1 Open Burning and Detonation of Explosives**

Badger Disposal does not Open Burn or Detonate Explosives.

2.11.2 Point Source Discharges

Badger Disposal does not have process discharges directly to the waters of the state or municipal sewer system. Surface water runoff drains to an unnamed tributary of Lincoln Creek. Storm water is regulated by WPDES Permit #WI-S067857-2. Badger Disposal maintains a Stormwater Pollution Prevention Plan.

2.11.3 Surface Water Run-On and Run-Off

The existing facility as well as future expansion are designed so that all storage and handling activities are conducted within enclosed buildings or under canopy. This eliminates the possibility of precipitation accumulation in the containment structures for all storage areas. To minimize the possibility of runoff, Badger Disposal performs the following preventative actions:

- Incoming materials are prescreened prior to acceptance.
- Accepted materials are then directed into the container storage area. All handling and storage areas are appropriately contained.
- Loading and unloading areas are paved and diked in a manner to preclude runoff from entering surface waters and groundwater.

SECTION 3
FEASIBILITY AND PLAN OF OPERATION REPORT
[Sections NR 640.06(1) and NR 645.06(1)]

3.1 Narrative Description NR 640.06(1)(a)/NR 645.06(1)(a)

3.1.1 Legal Description

The Badger Disposal facility is located in a primarily industrial area within the city of Milwaukee, Wisconsin, at a location east of the intersection of West Hemlock Street and 60th Street. The geographic coordinates of this location are north latitude 43°09'4.2552" and longitude 87°58'53.9364". A drawing depicting the legal boundaries of the property on which the facility is located is included in Section 7, Attachment B – Badger Disposal – Current Operations Drawing #05490-OV1.

The legal description for the site is:

All of lots 9 and 10 in block 1 of Megal Good Hope Industrial Park, and parcel 2 of certified survey map no. 6287, being a part of the southwest ¼ of the Southwest ¼ of Section 14, Town 8 North, Range 21 East, in the City of Milwaukee, Milwaukee County, Wisconsin, bounded and described as follows: Commencing at the Southwest corner of said ¼ section; thence N00°28'43"E, 872.59 feet, thence N88°21'38"E, 545.03 feet to the point of beginning; thence N01°39'52"W, 233.28 feet to the southerly line of West Hemlock Street; thence N88°20'08"E along said line, 200.00 feet; thence 33.44 feet along an arc of a circle whose center is to the right whose radius is 39.66 feet and whose chord bears S67°30'20"E, 32.46 feet; thence 88.62 feet along an arc of a circle whose center is to the left whose radius is 50.00 feet and whose chord bears N85°52'19"E, 77.47 feet; thence S45°47'02"E, 153.00 feet, thence S01°39'52"E, 23.68 feet; thence N88°21'38"E, 93.97 feet; thence N44°08'26"E, 243.97 feet to the southwesterly right-of-way of the Union Pacific R.R. Co.; thence S49°00'26"E along said line, 150.88 feet; thence S00°25'51"W, 158.05 feet; thence S88°21'38"W, 787.60 feet; to the point of beginning.

3.1.2 Ownership

The Badger Disposal of WI., Incorporated site is owned by: Badger Investment Realty, LLC
5611 West Hemlock Street
Milwaukee, WI 53223

3.1.3 Site size and Land Use and Zoning

The property on which the Badger Disposal facility is located covers approximately four acres. The Badger Disposal facility is bounded on the north by JES Lighting Inc. a lighting distributor and CPI Restoration Inc. a restoration company, on the northeast by the Chicago and Northwestern Railroad; on the east and south by Packaging Corporation of America, a manufacturer of cardboard boxes; on the west by Journeymen Tool & Technologies, Inc. a tool and die manufacturer. There are approximately 281 single family residential homes, 41 multi-family dwellings, and approximately 50 commercial/industrial establishments located within 0.5-miles of the facility. The more heavily populated residential subdivisions begin approximately 0.2 miles northeast of the facility across the railroad tracks. A Plat Map indicating property boundaries within 0.5 miles of the facility is provided as Sheet 5 of 18.

No nursing homes or hospitals are located within a 1/2 mile radius of the Badger Disposal facility. There are two country clubs; to the west, approximately 810 feet from the Badger Disposal facility is Brynwood Country Club and to the east, approximately 1,350 feet from the Badger Disposal facility is Tripoli Golf Club. No other parks or recreational areas are known to exist within a 1/2 mile radius of the Badger Disposal facility.

Zoning maps provided by the City of Milwaukee Department of City Development show that the facility is zoned for industrial use, which is consistent with the present and proposed facilities. The properties surrounding the Badger Disposal facility are currently used for manufacturing, warehousing, and other commercial activities. Surrounding property owners include:

North of Badger Disposal
5606 W. Hemlock Street
Megal Development Corp
P.O. Box 18661
Milwaukee, WI 53218

Northeast of Badger Disposal
5601 W. Hemlock Street
Megal Development Corp.
12650 Lisbon Road
Brookfield, WI 53005

East/Southeast of Badger Disposal
5400 W. Good Hope Road
Strangco Inc.
1900 Spring Road
Oak Brook, ILL 60523

West of Badger Disposal
5737 West Hemlock Street
Journeymen Tool & Technologies
5737 W. Hemlock Street
Milwaukee, WI 53223

3.2.7 Adjacent Landowners

North of Badger Disposal

5606 W. Hemlock Street
Megal Development Corp
P.O. Box 18661
Milwaukee, WI 53218

Northeast of Badger Disposal

5601 W. Hemlock Street
Megal Development Corp.
12650 Lisbon Road
Brookfield, WI 53005

East/Southeast of Badger Disposal

5400 W. Good Hope Road
Strangco Inc.
1900 Spring Road
Oak Brook, ILL 60523

West of Badger Disposal

5621 W. Hemlock Street
Journeyman Tool & Technologies
5737 W. Hemlock Street
Milwaukee, WI 53223

South of Badger Disposal

5600 W. Good Hope Road
Tenneco Packaging Inc.
1025 W. Everett Road
Lake Forest, IL 60045

3.2.8 Zoning

Zoning maps provided by the City of Milwaukee Department of City Development (see Sheet 6 of 18) show that the facility is zoned for industrial use, which is consistent with the present and proposed facilities. The properties surrounding the Badger Disposal facility are currently used for manufacturing, warehousing and other commercial activities.

3.2.9 Present Land Use

The Badger Disposal property is currently utilized as a transfer, storage and recycling facility and intends to continue as such.

3.3 Maps and Plans NR 640.06(1)(c), (d)/NR 645.06(1)(c),(d)

3.3.1 Topographic Map

Topographic maps are provided in Appendix P, Sheet 3 of 18.

**TABLE OF CONTENTS SECTION 7
CURRENT FACILITY OPERATIONS**

	Page
7.1 Site Description	7-1
7.2 North Drum Storage Warehouse Description	7-1
7.3 2007 Warehouse Addition Description	7-2
7.4 2009 Lab Pack Building Description	7-4
7.5 Lab Packing Operations	7-7
7.6 Bulking Activities	7-7
7.7 Fuel Blending Activities	7-8
7.8 Storage/Transfer Activities	7-10
7.9 Aerosol Can Puncturing	7-11
7.10 Non-Hazardous Waste Operations	7-11
7.11 Approval Procedure	7-12
7.12 Receiving Procedure	7-13
7.13 Rejection Procedure	7-14

SECTION 7

CURRENT FACILITY OPERATIONS

7.1 Site Description

Badger Disposal currently operates out of three buildings located at 5611 West Hemlock Street, Milwaukee, WI. The buildings are referred to as the North Drum Storage Warehouse, the 2007 Warehouse Addition and the 2009 Lab Pack Building. All of these buildings are shown on the Current Operations drawing #05490-OV1 located in Attachment B of this section.

7.2 North Drum Storage Warehouse:

The North Drum Storage Warehouse is a licensed hazardous and solid waste storage facility within an existing building which consists of an 11,000-square foot licensed storage area and other non-regulated areas such as a laboratory, reception area and administrative offices. The North Drum Storage Warehouse has the capacity to store up to 94,600 gallons of hazardous and non-hazardous waste or 1,720 55-gallon drums, or their equivalents. The total capacity consists of a combination of hazardous and non-hazardous waste which cannot exceed a maximum of 39,600 gallons of hazardous waste (equal to 720 55-gallon drums) and 82,300 gallons of non-hazardous waste (equal to 1,500 55 gallon drums). A current drum storage plan (drawing #05490-D1) for this building is located in Attachment B of this section.

This building is constructed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents into the air, soil or surface water which could threaten human health or the environment. All containment areas are designed in accordance with the requirements of WAC NR 664.0175. The warehouse building is constructed of 12-inch thick outside walls and 6-inch thick inside walls. All exit doors are curbed. Dike walls are constructed 6-inches high and 10-inches thick. The floor of the container storage area has been sealed with an impervious coating. A 4-hour rated fire wall has been constructed with two automatic fire doors and frames, one on the east side of the firewall the other on the west side of the firewall. As an integral part of the fire wall, the fire doors automatically close if excessive heat is detected, isolating the process/storage portions of the building from the laboratory and office area. An AFFF fire suppression system has been installed with individual sprinkler heads located throughout the ceiling of the warehouse.

In the past, containers in this building were stored on containment pallets. In the future containers will be stored on wooden pallets, with the exception of oxidizers, water reactives, spontaneously combustibles, reactive cyanides and organic peroxides, which will be segregated and stored on containment pallets.

Operations that take place in this building include bulking, fuel blending and aerosol can puncturing. These operations are described in Sections 7.6, 7.7 and 7.9.

7.3 2007 Warehouse Building Addition

Badger Disposal began construction of a 6,000 square foot addition to the North Drum Storage Warehouse on April 8, 2007. The addition was completed November 12, 2007. Megal Development Corporation constructed the addition, Brian Cooley & Associates, LLC is the architectural firm that designed the addition. This building addition provides for storage of a combination of up to 492 fifty-five gallon containers of non-ignitable hazardous waste and up to 984 fifty-five gallon containers of non-ignitable nonhazardous waste or their equivalents. This addition was built per architectural drawings A-3.0, A-4.0, S-2.0, S-1.1, S-1.2, S-1.3, S-2.0, S-2.1 and 2-2.2 from Brian Cooley & Associates, LLC. Copies of these drawings are located in Attachment B of this section. A current drum storage plan drawing #05490-D1 is located in Attachment B of this section.

On December 20, 2007 Badger Disposal received an approval from the WIDNR for a modification to its hazardous waste container storage license for storage of an additional 492 55-gallon containers (27,060 gallons) of non-ignitable and non-reactive hazardous waste in the 2007 Warehouse Building Addition.

This addition has been designed, constructed, and is maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment. The north wall of the addition has been constructed to provide a 4-hour fire separation from the existing building with a 3- hour roll up fire door. The west wall has been constructed as a 3- hour fire wall, and the south wall as a 1- hour fire wall. A wet fire sprinkling system with foam concentration has been installed with sprinkler heads throughout the warehouse.

The addition is designed to provide environmentally safe storage for all containerized materials. The building is designed with 8" thick walls and reinforced concrete floors. The concrete floor has been sealed with an impervious coating supplied and installed by Parker Coatings, Inc. The floor was acid etched, cleaned and then rinsed with water. The expansion joints were cleaned out and filled with Parker NP-829 flexible crack filler. The floor sealant is CHEMSEAL 1015-WRU a wear resistant urethane. This sealant was applied in two coats with rollers at 8 mils DFT. The floor is inspected by Parker Coatings, Inc. semi-annually and repaired as necessary.

The addition is designed with concrete curbing at entrances to the building to minimize the risk of any accidental spillage leaving the confines of the building. The curbing, walls and floors are

designed to meet the requirements of WAC NR 664.0175 and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage areas of the building. Containment ramps were installed at all doorways. Secondary containment calculations for this area are provided in Appendix H of the Preparedness and Prevention Plan. Run-on is not a concern within the building addition in that it is entirely enclosed.

Containers managed in the storage area include drums in various sizes such as 5, 10, 15, 20, 30, 55 and 85 gallon, 275 gallon totes and cubic yard bags and boxes. Solid containers and lab packs are stored two high, liquids are stored on a single level. When storing containers two high, containers of equal or larger size or quantity are stored on the bottom level. When containers greater than 20 gallons in size are stored 2 high, pallets are used to separate the first level from the second level. Containers are stored on wooden pallets. Oxidizers, water reactives, spontaneously combustibles, reactive cyanides and organic peroxides are not stored in this warehouse addition. Placards are used to clearly identify the separate storage areas for the different types of hazardous wastes stored. Storage of acids and bases are separated by the containment curb. Acids are stored in Section B and Bases are stored in Section A. Wastes are evaluated for compatibility to determine the appropriate storage area in the warehouse addition. For example, heavy metal liquids or solids can be stored with either acids or bases. Non-reactive F006-F019 solids/sludges are stored with bases. Non-ignitable hazardous Soils/debris with F002-F005 waste codes can be stored in either section. Toxic organic and inorganic waste can be stored in either section. Only non-reactive and non-ignitable waste will be stored in either section of the addition.

Badger Disposal maintains three foot aisle spacing between rows of drums to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment in an emergency. Lines are clearly marked on the floor to delineate the rows of containers from the aisles. This allows easy access to containers so spills or leaks can be easily detected and cleaned up. Inspections are completed as outlined in the Inspection Schedule, Appendix E of the FPOR.

Activities that take place in this addition are storage, lab packing and bulking. Acids and bases are bulked from 55 gallon drums into totes or a 6,000 gallon tanker and shipped off site for neutralization and chemical treatment. Once truckload quantities of acids or bases are accumulated, Badger Disposal contracts with a fully licensed transporter to bring in a 6,000 gallon tanker truck. Badger Disposal only uses empty tanker trucks for its bulking activities. Each tanker is checked upon arrival, if the tanker contains residue it is sent back. Every tanker driver has a copy of the last hauled manifest with the trailer. Upon arrival at the facility the waste codes from the last hauled manifest are compared to the waste codes for the containers to be pumped to insure compatibility. Drums from Section B will be pumped from within section B, drums from Section A will be pumped from within section A. The vacuum tanker truck loads

from Dock#3 located on the southeastern corner of the building addition. The truck trailer is backed over the berm and loaded inside of the building.

Upon arrival, the tanker truck will back over to Dock#3 for inspection. Badger Disposal personnel inspect the integrity of the truck as well as the condition of the tanker pump, filter, hoses and complete and sign a Tanker Truck and Loading Area Inspection Log. During this inspection the warehouse containment integrity is also inspected for leaks, cracks and cleanliness. Once the inspection is completed the trailer is backed into the warehouse for loading. Badger Disposal process personnel put on appropriate safety equipment which includes respirators, safety glasses, safety shoes, gloves and tyvek suits during the drum pumping operations.

A wand is connected to the trailer hose, the bung hole of the drum is opened, the wand is inserted and the drum is vacuumed empty. The bung is put back onto the drum and the empty drum is moved to a storage trailer where it will be shipped off site for reclamation. All drums are pumped from inside of the bermed warehouse area. A liquid level control on the trailer indicates when the trailer is full. A sample of the tanker material is obtained for quality control purposes. The tanker trailer is inspected to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. An outgoing manifest is signed and the tractor trailer leaves Badger Disposal.

7.4 2009 Lab Pack Building

On October 22, 2008 Badger Disposal purchased a building located at 5621 West Hemlock Street, Milwaukee, WI. This building will be utilized for lab pack storage and it will be referred to in this document as the 2009 Lab Pack Building. This property is contiguous to the property owned at 5611 W. Hemlock Street, Milwaukee, WI. On May 22, 2009 Edgewood Surveying completed a new survey that combined both properties into one. The address for these combined properties is now 5611 W. Hemlock Street, Milwaukee WI. A copy of this new survey is located in Attachment B of this section.

The 2009 Lab Pack Building consists of a 7,000 square foot licensed solid waste storage area and 8,000 square feet of offices. On Badger Disposal submitted a modification to the WIDNR to allow for storage of 18,975 gallons or 345 fifty-five gallon containers, or their equivalents, of hazardous waste in 3,500 square feet of this Lab Pack Building. Lab Pack storage was previously approved for a new Lab pack Building in our Final Determination to Conditionally Approve a Feasibility and Plan of Operation Report for a Hazardous Waste Treatment and Storage Facility (dated June 29, 2007). The Lab Pack storage area for the new warehouse is identified as section A on the 2009 Lab Pack Bldg. Drum Storage Plan #05490-D2. Section B on drawing #05490-D2 is for solid waste storage.

Badger Disposal began a retrofit of this warehouse space on March 16, 2009. Brian Cooley & Associates, LLC is the architectural firm that designed the retrofit. This retrofit is built per architectural drawings A-2.0, A-3.0, A-3.1, S-1.1, S-3.0, S-3.1 and S-4.0 from Brian Cooley & Associates, LLC. Copies of these drawings are located in Attachment B of this section.

The building retrofit is designed to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents into the air, soil or surface water which could threaten human health or the environment. A 2- hour rated fire wall with three automatic fire doors and frames exists on the north side of the warehouse. As an integral part of the fire wall, the fire doors automatically close if excessive heat is detected, isolating the storage portions of the building from the office area. A 2- hour rated fire wall is located on the east and west side of the building for proper separation requirements between the North Drum Storage Warehouse and the 2009 Lab Pack Building. A wet fire sprinkling system with foam concentration has been installed with sprinkler heads throughout the warehouse. The fire protection system was designed and installed by United States Fire Protection as detailed in their design drawing No. 401593-FP1, dated 2-4-2009.

The lab pack storage area is classified as hazardous occupancy; therefore, all electrical wiring will comply with state and NEC 2008 codes, Art. 501, Class 1, Divisions I and II. In accordance with these code requirements, explosion- proof lighting has been installed throughout the lab pack storage area. The existing non-rated Electrical service has been relocated to the outside of the building.

The heating and ventilating for the 2009 Lab Pack Building was designed and certified by Bruce Griffin, P.E. and DR Kohlman, Inc. (Dwg. No. HV-1, dated 1-15-09). Building heat is provided by an oil boiler that burns on-spec oil.

The retrofit is designed to provide environmentally safe storage for all containerized materials. The concrete floor has been sealed with an impervious coating supplied and installed by Parker Coatings, Inc. The floor was acid etched, cleaned and then rinsed with water. The expansion joints were cleaned out and filled with NP-1 flexible crack filler. The floor sealant is CHEMSEAL 1015-WRU a wear resistant urethane, which was applied at 8 mils dry film thickness (DFT). The floor will be inspected by Parker Coatings, Inc. semi-annually and repaired as necessary.

An alarm system has been installed which includes four fire alarm pull stations and four emergency strobe lights. Fire extinguishers and emergency exit lights have also been installed.

The warehouse retrofit is designed with concrete curbing at entrances to the warehouse to minimize the risk of any accidental spillage leaving the confines of the building. The curbing, walls and floors are designed to meet the requirements of WAC NR 664.0175 and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage areas of the building. 4 in high containment ramps were installed providing containment capacity of 6,573 gallons. Containment calculations are located in the Preparedness and Prevention Plan – Appendix H of the approved Feasibility and Plan of Operation Report. Run-on is not a concern within the warehouse in that it is entirely enclosed.

Containers managed in the storage area include drums in various sizes such as 5, 10, 15, 20, 30, 55 and 85 gallon, and cubic yard bags and boxes. Solid lab packs are stored two high, and liquids are stored on a single level. Lab packs will be stored on wooden pallets for the exception of oxidizers, water reactives, spontaneously combustibles, reactive cyanides and organic peroxides, which will be segregated and stored on containment pallets. When storing containers two high, containers of equal or larger size or quantity will be stored on the bottom level. When containers greater than 20 gallons in size are stored 2 high, pallets will be used to separate the first level from the second level. Lab packs received will include flammable liquids and solids, combustibles, corrosives, oxidizers, organic peroxides as well as toxic liquids and solids. Placards will be used to clearly identify the separate storage areas for the different types of hazardous wastes stored. Storage of hazardous wastes will be separated from non-hazardous wastes by a containment curb running through the middle of the warehouse. Badger Disposal will only accept lab packs bearing the waste codes listed in Badger Disposal's Part A Application signed and dated July 31, 2009. A drum storage plan for this building (drawing #05490-D2) is located in Attachment B of this section.

Badger Disposal will maintain three-foot aisle spacing between rows of containers to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment in an emergency. Lines will be clearly marked on the floor to delineate the rows of containers from the aisles. Inspections will be completed as outlined in the Inspection Schedule, Appendix E of the FPOR. This allows easy access to containers so spills can be easily detected and cleaned up.

An enclosure is being built to connect the North Drum Storage Warehouse building to the 2009 Lab Pack Building. An additional dock (Dock #5) is being constructed on the north side of this enclosure adjacent to loading Dock #1. This enclosure and dock are shown on Badger Disposal Current Operations drawing #05490-OV1. An opening on the west wall of the North Drum Storage Warehouse will allow for drum movement between both buildings. An overhead door (Dock #4) has been installed on the south west corner of the 2009 Lab Pack Building and a portable ramp will be utilized for receiving purposes until the enclosure is completed.

Activities that take place in the 2009 Lab Pack Building are solid waste storage and bulking as well as lab packing. As shown on the Traffic Pattern Plan drawing #05490-T1, located in Appendix B of this section, solid wastes are received and shipped out of Dock #4 located on the west side of the building as well as the future Dock #5. Dock #4 is also designed for shipping out 20-cubic yard roll-off boxes which have been filled with solid waste. Lab packs will be received and shipped out of Dock#4 and Dock#5.

7.5 Lab Packing Operations

The current lab pack re-packaging operations allow Badger Disposal the capability of re-packaging containers of compatible laboratory chemicals for off-site shipment to permitted Treatment Storage and Disposal Facilities (TSDF). The lab packing operations take place in the North Drum Storage Warehouse, the 2007 Warehouse Addition as well as the 2009 Lab Pack Building. Badger Disposal has set up separate lab pack storage and repack areas that have distinct boundaries and are marked with yellow painted lines. The hazard class of the material in each storage/repack area is clearly communicated by hazardous materials placards corresponding to the materials that are presently in that storage/repack area. The storage areas are located on the north side and the southwest corner of the North Drum Storage Warehouse, the northwest side of Section B and south east side of Section A in the 2007 Warehouse Addition and Section A in the 2009 Lab Pack Building.

As lab packs are received in 5, 10, 15, 20, 30 and 55-gallon containers, as well as All-Pak boxes, they are placed in appropriately designated storage/repack areas. They are then depacked and repackaged into larger containers. Lab packs are only re-packed by facility Chemists. The Chemist reviews the inventory sheet and compares it to the actual contents of the lab pack, and then, based upon his determination of what containers can be repacked together, the Chemist begins the repackaging. Containers in the lab packs are combined with other containers that have similar hazard classes in the lab packs without opening any of the containers. The contents of the containers in the lab packs are not combined with any of the containers. Once a lab pack is full it is shipped off-site to a fully licensed TSDF.

7.6 Bulking Activities

Bulking activities are conducted in the North Drum Storage Warehouse and the 2007 Warehouse Addition. Bulking in the North Drum Storage Warehouse takes place in the repack area on the northeast end of the building. Wastes are received in 5 gallon pails, 15 gallon drums, 30 gallon drums, 55 gallon drums and cubic yard boxes as loose pack waste streams. These containers are then bulked into larger containers such as 55 gallon drums or totes. These loose packs are of like materials with identical waste codes. Badger Disposal does not bulk oxidizers, toxic liquids/solids or poisons. Once bulked the drums and/or totes are either shipped off-site for

disposal or if a candidate for fuel blending, pumped into an outgoing fuel blend tanker. After the drums are RCRA emptied, they are crushed or sent off site for recycling. Empty cubic yard boxes are discarded.

Other materials that are bulked include solid rags and absorbents that are bulked into cubic yard boxes and shipped off site for fuel blending. A liner is placed within the cubic yard box. The emptying of the drums of solids into cubic yard boxes is accomplished by means of a drum tipping unit attached to a fork lift which dumps the materials into the cubic yard box. Only DOT approved shipping containers are utilized for this operation. Only organic solids with little or no volatility and inorganic solids are bulked.

Acids and bases are bulked in the 2007 Ware House Addition from 55 gallon drums into totes or a tanker and shipped off site for neutralization and chemical treatment. Transfer of hazardous waste from drums into totes is conducted in a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices of handling flammable, ignitable, explosive, reactive or other hazardous materials. Badger Disposal uses a submerged-fill pipe to load liquids into totes.

Batteries and pcb capacitors and ballasts are also bulked from small containers to large containers for more economical disposal options. Paint cans/pails are shipped into Badger Disposal in various sized containers such as 30 gallon drums, 55 gallon drums and cubic yard boxes. The cans and pails are emptied into 55 gallon drums. If pumpable the drums are shipped out in a fuel blend tanker. If not pumpable they are shipped off-site in drums for fuel blending.

7.7 Fuel Blending Activities

On August 23, 1996 Badger Disposal of WI., Inc. (dba EOG Disposal, Inc.) received a Conditional Approval for Legitimate Recycling Exemption – Hazardous Waste Burned for Energy Recovery/Fuel Blending and Marketing Activities. On June 14, 2006 Badger Disposal of WI., Inc. received a notice from the WIDNR that as of August 1, 2006, the recycling exemption in ch. NR 625 would no longer exist and that commercial fuel blending activities would be subject to full hazardous waste treatment facility requirements, including licensing. On July 10, 2006 Badger Disposal applied for a temporary authorization to continue its fuel blending activities. On August 15, 2006 Badger Disposal received a 6 month temporary authorization to continue its fuel blending activities. On February 6, 2007 another 6-month temporary authorization approval for the fuel blending activities was received from the WIDNR. On July 26, 2007 a Hazardous Waste Treatment-Container Commercial License was issued to Badger Disposal

In order to comply with the new standards Badger Disposal implemented certain procedural changes. Previously, fuel blending activities occurred at Dock#1 on the northwestern corner of the North Drum Storage Warehouse. This operation was moved to inside of the existing storage building at Dock#2 located on the southeastern corner. The truck trailer is backed over the berm for pumping, the tractor remains outside of the building.

Additional inspection requirements have been implemented that include a more extensive written inspection of the tanker truck and loading area. A new Tanker Truck and Loading Area Inspection Log has been designed and is included in Appendix A of Badger Disposal's Inspection Schedule.

The purpose of Badger Disposal's fuel blending activities is to collect and direct both nonhazardous and hazardous wastes into recycling processes. The first step in our fuel blending process is to determine that a generator's waste stream is suitable for fuel blending. This is accomplished by requiring the generator or broker to complete a Waste Profile form with Generator Information, Waste Description, General Characteristics, RCRA information, Viscosity, % water, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. The profile data is reviewed by Badger Disposal's General Manager who determines whether the stream is fuel blendable. An example of a candidate stream would be one with a BTU value of >5,000, water content of 0-30%, halogens of 0-20% and flash point of <140F. Once the profile has been classified as acceptable for the fuels program, an approval letter is sent to the generator. Upon completion of the approval process, the waste is shipped to Badger Disposal.

Wastes are received in various container sizes such as 5 gallon pails, 10 gallon pails, 15 gallon drums, 30 gallon drums, 55 gallon drums and 275 gallon totes. Upon receipt at Badger Disposal, 10% of each waste stream destined for fuel blending is sampled and analyzed for BTU's, Halogens, %Water, %Solids, pH and flash point. The analysis is matched to the information provided on the Waste Profile form. If all of the information matches, the drums are moved into appropriate storage locations. If the information does not match, the generator is contacted and an amended profile is required.

Once truckload quantities are accumulated, Badger Disposal contracts with a fully DOT licensed transporter to bring in a 6,000-gallon vacuum tanker truck. Badger Disposal only uses empty tanker trucks for its fuel blending activities. Each tanker is checked upon arrival, and if the tanker contains residue it is sent back. Every tanker driver has a copy of the last hauled manifest with the trailer. Upon arrival at the facility, the waste codes from the last hauled manifest are compared to the waste codes for the containers to be pumped to insure compatibility. Drums are staged for pumping inside of the bermed warehouse area. The vacuum tanker truck loads from

Dock#2 located on the southeastern corner of the North Drum Storage Warehouse. The truck trailer is backed over the berm and loaded inside of the North Drum Storage Warehouse .

Upon arrival, the tanker truck will back over to Dock#2 for inspection. In order to comply with NR 664 standards, Badger Disposal has implemented a new inspection procedure: Badger Disposal personnel will inspect the integrity of the truck as well as the condition of the tanker pump, filter, grounding clamps and hoses and complete and sign a Tanker Truck and Loading Area Inspection Log. During this inspection, the warehouse containment integrity is also inspected for leaks, cracks and cleanliness. Once the inspection is completed, the trailer is backed into the warehouse for loading.

Badger Disposal process personnel put on appropriate safety equipment which includes respirators, safety glasses, safety shoes, gloves and tyvek suits during the drum pumping operations.

A grounding cable from the tanker trailer is connected to the warehouse grounding cable. This grounding cable is connected to the lid of the drum to be pumped. A wand is connected to the tanker trailer hose. The bung hole of the drum is opened, the wand is inserted and the drum is vacuumed empty. The bung is put back onto the drum, the grounding cable is removed and the empty drum is moved to a storage trailer where it will be shipped off site for reclamation. All drums are pumped from inside of the bermed warehouse area. A liquid level control on the trailer indicates when the trailer is full. A sample of the tanker material is obtained for quality control purposes. The tanker trailer is inspected to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. An outgoing manifest is signed and the tractor trailer leaves Badger Disposal. Fuel blended materials are transported to approved cement kilns who use the material as a secondary fuel source.

Paint cans and pails are also shipped into Badger Disposal in various sized containers such as 30-gallon drums, 55-gallon drums and cubic yard boxes. The cans and pails are emptied into 55-gallon drums. If pumpable, the drums are shipped out in a fuel blend tanker. If not pumpable, they are shipped off-site in drums for fuel blending.

7.8 Storage/Transfer Activities

Not all containers shipped into Badger Disposal are candidates for bulking. Only like materials with identical waste codes are bulked. Any other containers are stored until truck load quantities are accumulated or it is economically feasible to ship the drums off site. Containers are not stored on site for over a period of one year. Containers are shipped off site to a fully licensed TSDF.

7.9 Aerosol Can Puncturing

Aerosol can puncturing takes place in the North Drum Storage Warehouse. Aerosol paint cans are punctured using an aerosol puncturing device with a carbon filter. The puncturing device is secured onto the top of a 55 gallon drum, cans are punctured and the liquid is drained into the 55 gallon drum. Vapors are captured by a carbon filter which is part of the puncturing device. The empty aerosol cans are collected and shipped to a recycling facility. The spent carbon from the puncturing unit is put into the paint drum, the paint drum is then either pumped into a fuel blend tanker or shipped off site for fuel blending.

7.10 Non-Hazardous Waste Operations

Non hazardous waste operations occur at the North Drum Storage Warehouse and the 2009 Lab Pack building. Containers such as 5 gal., 10 gal., 15 gal., 20 gal., 30 gal., 55 gal., drums, 275 gal., totes and cubic yard boxes are received at Dock #1, Dock# 4 and the future Dock# 5.

Targeted non-hazardous waste streams include non-hazardous commercial products and chemicals including:

- Coolants from cars, machines, manufacturing, pumps.
- Cleaning solutions including soaps, surfactant mixtures and detergents.
- Wastewaters including metal salt solutions, neutralization baths, mop waters, rinse waters.
- Organic liquids and/or solids including surfactants, dyes, inks, unwanted or off-spec products and chemicals. All must have a flash point of 140 degrees F or more.
- Inorganic liquids and/or solids including metal salts, by-products, unwanted or off-spec. products and chemicals.
- Paints, paint solids and sludges, both latex and oil based, with flash points greater than 140 degrees F.
- Non-hazardous solids include unwanted chemicals, commercial products, detergents, filter cakes, catalysts, floor sweepings, absorbents and clean-up materials.

Some wastes are stored and shipped off-site when truck load quantities are accumulated in their original containers. Liquid wastewaters, purge waters and coolants are accumulated until there are enough drums to fill a 5,000 gallon tanker. These drums are then pumped into a tanker. Once the tanker is full, a manifest is signed by both Badger Disposal and the transporter and the tanker is shipped off site to a fully licensed TSDF for wastewater treatment.

Oil, oily liquids and combustible liquids are received, stored and transferred in the North Drum Storage Warehouse. Combustible liquids are pumped into fuel blend tankers. Oils and oily waters are accumulated until there are enough drums to pump into a 2,000 gallon tanker. This tanker is loaded inside of the warehouse just as the tankers are for fuel blending. Once the tanker is full, a manifest is signed by Badger Disposal and the transporter, and the tanker is shipped off site to a fully licensed TSDF for oil recovery/reclamation.

When there are enough solid drums to make an economically sized load, an empty roll-off is delivered into the 2009 Lab Pack Building through Dock 4 and containers of non hazardous soils, inks, rags, absorbents, latex paints, plastic or metal are dumped into the roll-off. Once the roll-off is full, the transporter is contacted to pickup the roll-off and an outgoing manifest is completed and signed by both Badger Disposal and the transporter and the roll-off is shipped off site to a fully licensed TSDF.

During all facility operations, warehouse personnel are required to wear appropriate personal protective equipment including safety glasses and/or goggles, protective steel-toed work boots, tyvek suits, protective gloves, air filtering respirators with activated carbon filters as well as air filtering respirators for everyday use.

7.11 Approval Procedure

Badger Disposal currently accepts hazardous and non hazardous wastes in multiple sized containers such as 5 gal., 10 gal., 15 gal., 20 gal., 30 gal., 55 gal., 85 gal. drums, cubic yard boxes, cubic yard bags and 275 gal. totes for transfer and storage as well as lab packing and fuel blending. Each of these operations begins with the completion of a Waste Profile form by a generator or broker with Generator Information, Waste Description, General Characteristics, RCRA information, Viscosity, % water, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. Lab Pack profiles are accompanied by an inventory list of laboratory chemicals packed in each drum. The profile data is reviewed by Badger Disposal's General Manager who determines whether the waste stream or lab pack is acceptable for receipt at Badger Disposal. This is determined by making certain that the lab pack and/or waste stream has waste and waste codes that Badger Disposal is permitted to receive as well as characteristics and composition that will meet outgoing waste stream requirements. Once the profile has been classified as acceptable, an approval letter is sent to the generator. Upon completion of the approval process, the waste is acceptable for shipment into Badger Disposal. Generators are required to resubmit waste identification forms annually.

7.12 Receiving Procedure

Hazardous wastes are received at all three Badger Disposal warehouses, Non-hazardous wastes are received at the North Drum Storage Warehouse and the 2009 Lab Pack Building.

In order to ensure proper waste handling, storage and transfer for ultimate disposal, Badger Disposal follows the procedures specified in the facility Waste analysis Plan located in Appendix D as well as the Solid Waste Analysis Plans submitted to the WIDNR November 30, 1990 and June 20, 2000 . The goals of these Waste Analysis Plans include being able to identify and separate waste types which are incompatible, ensure proper handling procedures are identified for various waste types, and to ensure that all waste types handled are included in the Badger Disposal permit.

Drums and totes are received at Badger Disposal from fully DOT licensed transporters in box van trailers. Upon arrival at Badger Disposal, the truck driver is instructed to back the trailer into Dock #1, Dock#4 or Dock #5 and to bring the manifests/bills of lading and any other paperwork associated with the load to the main office where the Plant Manager and/or General Manager review the paperwork. The manifest/bill of lading wording is validated to ensure that it meets regulatory requirements. At a minimum the following information will be checked on each manifest/bill of lading:

- The generator's name, address, and EPA Identification number if applicable
- Each transporter's name and EPA Identification number
- The designation of the waste shipment (i.e., hazardous waste management facility, address and EPA Identification number)
- Proper DOT shipping name and number
- The quantity or volume of waste in the shipment
- The number and type of container in the shipment
- The EPA waste code number
- A signed, dated certification of the shipment's contents

The driver is instructed to return to his truck. Warehouse personnel make certain that the catchment sump located inside of the warehouse at Dock 1 is turned off and the drums are off loaded. During off-loading, warehouse personnel check to ensure that all labels are consistent with the manifest/bill of lading and verify the number of drums. Any damaged or incomplete label will be immediately rectified. Drums are also checked for integrity at the time of off-loading and any leaking drums are immediately overpacked. Any discrepancy in drum quantities are noted as a discrepancy on the manifest/bill of lading. Containers from each generators waste stream are randomly chosen for sampling and analysis. A 10% composite sample is taken of incoming streams (excluding lab packs, corrosive solids, filter press solids, cyanide solids, toxic

solids, organic solids such as rags, contaminated soils and paint cans. Drums are sampled with a coliwasa or equivalent SW-846 method. Once taken, the sample is labeled immediately with the generator name and is taken to the laboratory. The laboratory personnel additionally label the sample with a unique tracking number associated with the manifest for the load. Samples are then analyzed by the on site laboratory. Analysis includes BTU's, Halogens, %water, %solids, pH, specific gravity and flash point. The analysis is matched to the information provided on the waste profile form. If all of the information matches, the load is accepted and the containers are placed into appropriate storage locations in the warehouse. Each drum is labeled with a tag that indicates a drum number, generator name, generator address, waste stream number, DOT shipping name, storage area code, manifest number and date received. This information assists with the tracking of each drum to the ultimate facility. If the information does not match the waste profile form, the generator is contacted and an amended profile is required. Once the containers are off-loaded from the truck, the driver returns to the plant office to receive a signed copy of the manifest/bill of lading. A copy of the manifest/bill of lading is also sent to the generator and the WIDNR as required.

7.13 Rejection Procedure

Upon rejecting a waste or identifying a container residue that exceeds the quantity limits for empty containers, Badger Disposal will consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility Badger Disposal will return the rejected waste to the generator. Badger Disposal will send the waste to the alternative facility or to the generator within 60 days of the rejection or the container residue identification. While making arrangements for forwarding rejected wastes or residues to another facility, Badger Disposal will ensure that either the delivering transporter retains custody of the waste, or will provide for secure temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest. For full or partial load rejections and residues that are to be sent off-site to an alternate facility, Badger Disposal will prepare a new manifest in accordance with s. NR664.020(1) and the following instructions:

- (a) Write the generator's EPAID number in item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
- (b) Write the name of the alternate designated facility and the facility's EPAID number in the designated facility block (Item 8) of the new manifest.

- (c) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- (d) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).
- (e) Write the DOT description for the rejected load or the residue in Item 9 of the new manifest and write the container types, quantity and volume of waste.
- (f) Sign the generator's or offeror's certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- (g) For full load rejections that are made while the transporter remains present at the facility, Badger Disposal will forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the alternate facility space. Badger Disposal will retain a copy of this manifest for its records, and give the remaining copies to the transporter to accompany the shipment. If the original manifest is not used, Badger Disposal will use a new manifest and comply with pars. (a) to (f).

Except as provided in par. (g), for rejected wastes and residues that must be sent back to the generator, Badger Disposal will prepare a new manifest in accordance with s. NR662.020(1) and the following instructions:

- (a) Write the facility's EPAID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
- (b) Write the name of the initial generator and the generator's EPAID number in the designated facility block (Item 8) of the new manifest.
- (c) Copy the manifest tracking number found in Item 4 of the old manifest to the special handling and additional information block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- (d) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the discrepancy block of the old manifest (Item 18a).

- (e) Write the DOT description for the rejected load or the residue in Item 9 of the new manifest and write the container types, quantity and volume of waste.
- (f) Sign the generator's or offeror's certification to certify, as offeror of the shipment that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- (g) For full load rejections that are made while the transporter remains at the facility, Badger Disposal may return the shipment to the generator with the original manifest by completing Item 18a and 18b of the manifest and supplying the generator's information in the alternate facility space. Badger Disposal will retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, Badger Disposal will use a new manifest and comply with pars. (a) to (f).

If Badger Disposal rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in s. NR 661.07(2) after it has signed, dated and returned a copy of the manifest to the delivering transporter or to the generator, Badger Disposal will amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. Badger Disposal will also copy the manifest tracking number from item 4 of the new manifest to the discrepancy space of the amended manifest and will re-sign and date the manifest to certify to the information as amended. Badger Disposal will retain the amended manifest for at least 3 years from the date of amendment and will, within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended. Within 45 days, Badger Disposal will also send one copy of the amended manifest to the department in an electronic format specified by the department.

CONTINGENCY PLAN

**BADGER DISPOSAL OF WI., INC.
MILWAUKEE, WISCONSIN**

Revised August 21, 2009

<p>TABLE 3</p> <p>EMERGENCY RESPONSE TEAM</p>		
Team Members	Name	Title
Emergency Response Team Chief	Ron Mitchell	General Manager
Emergency Response Team Members	Henry J. Krier Martin W. Schmit Scott Zeinert	President Plant Manager Facility Chemist

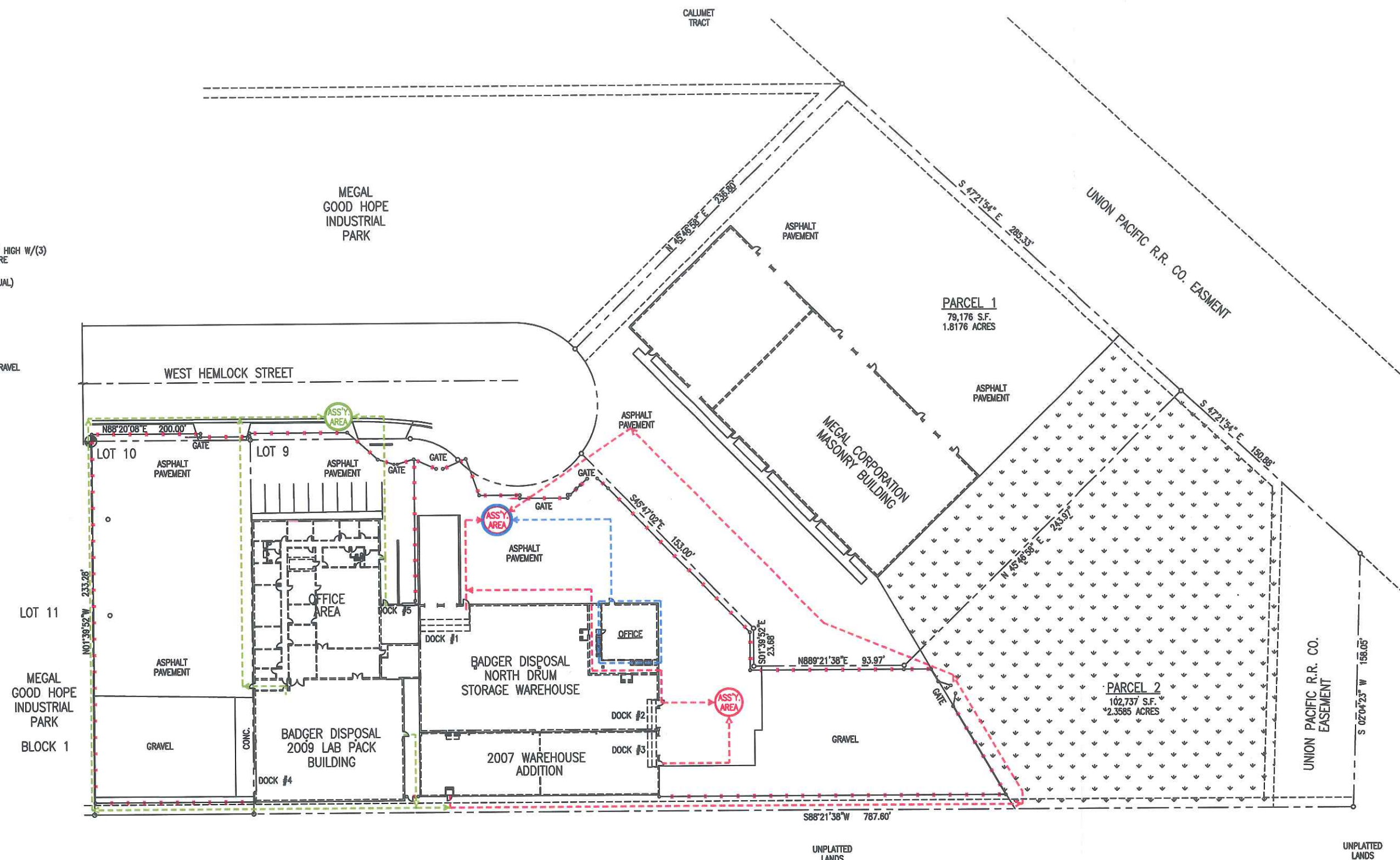
Revised August 21, 2009

TABLE 4		
FIRE BRIGADE PERSONNEL		
Fire Brigade	Name	Title
Fire Brigade Chief	Ron Mitchell	General Manager
Fire Brigade Members	Henry J. Krier	President
	Martin W. Schmit Scott Zeinert	Plant Manager Facility Chemist

Revised August 21, 2009

LEGEND

- EVACUATION ROUTE
- EVACUATION ROUTE
- EVACUATION ROUTE
- PUBLIC LIGHT POLE
- SECURITY FENCE 6'-0" HIGH W/(3) STANDS OF BARBED WIRE
- PANIC EXIT GATE (MANUAL)
- SWING GATE (MANUAL)
- ELECTRIC GATE
- PROPERTY LINE
- UNPAVED GRASS OR GRAVEL



EVACUATION ROUTE PLAN
N.T.S.

FIGURE 1

SPECTRUM
ENGINEERING
INCORPORATED

262-783-7725
FAX 262-783-7726
19395 West Capitol Drive,
Brookfield, Wisconsin 53045

THIS DRAWING, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, REMAINS THE PROPERTY OF SPECTRUM ENGINEERING INCORPORATED. ANY CHANGES, REPRODUCTION, OR UNAUTHORIZED USE, IN WHOLE OR IN PART, FOR OTHER PROJECTS IS PROHIBITED UNLESS EXPRESSLY APPROVED BY SPECTRUM ENGINEERING INCORPORATED.

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	REVISION
2	7/31/08	J.M.N.	ADDED PURCHASED PROPERTY TO WEST PER PROJECT NO. 08740.
1	10/11/07	J.M.N.	ADDED 2007 WAREHOUSE ADDITION PER PROJECT NO. 07640.

DRAWN BY:
S.A.M.
DESIGNED BY:
J.M. NOLL, P.E.
PROJECT MANAGER:
R.B. SMITS, P.E.

CHECKED BY:
BADGER



Badger Disposal of WI, Inc.
5611 West Hemlock Street
Milwaukee, WI 53223

BADGER DISPOSAL - MILWAUKEE FPO
CURRENT OPERATIONS
EVACUATION PLAN

DRAWING NUMBER:	05490-EV1
DATE:	10/11/07
PROJECT NUMBER:	08740
SHEET NUMBER:	

ATTACHMENT B

CURRENT FACILITY OPERATION DRAWINGS

Revised August 21, 2009

Current Operations Drawing #5490-OV1- Revision 2, dated 7/31/09

Current Operations Drawing #5490-D1

Current Operations Drawing #05490-D2 – New – 2009 Lab Pack Building Drum Storage Plan – Revision 2, dated 6/1/09

Current Operations Traffic Pattern Plan Drawing #05490-T1- Revision 2, dated 7/31/09

Current Operations Security Plan Drawing #05490-SY1-Revision 2, dated 7/31/09

Current Operations Emergency Equipment Layout Drawing #05490-EE1

Current Operations Emergency Equipment Layout Drawing #05490-EE2-New – Revision 2 – dated 6/1/09

2007 Warehouse Addition:

A-0.1 Title Sheet

A-1.0 Site Plan

A-1.1 Site Grading Plan/Erosion Control Plan

S-1.0 Foundation Plan

S-1.1 Foundation Details

S-1.2 Foundation Details

S-1.3 Foundation Details

S-2.0 Roof Framing Plan

S-2.1 Roof Framing Details

S-2.2 Door Opening Details

A-3.0 Floor Plan

A-4.0 Elevations

FP-1 Fire Sprinkler Plan

H-1 HVAC Plan

2009 Lab Pack Building:

A-0.1 Title Sheet

A-1.0 Existing Site Plan

A-2.0 Floor, Foundation, Framing Plan

A-3.1 Master Floor Plan

A-3.2 Pump Room Details

S-1.1 Structural Notes and Schedules

S-3.1 Foundation Details

S-4.0 Roof Framing Details

FP1 Fire Sprinkler Plan

HV-1 HVAC Plans

**CLOSURE PLAN FOR
BADGER DISPOSAL OF WI., INC.
MILWAUKEE, WI**

MARCH 2006

Revised August 21, 2009

TABLE 1

CLOSURE COST ESTIMATE – CURRENT OPERATIONS
REVISED AUGUST 21, 2009

Closure Activities	Unit Cost	Quantity	Total (\$)
Recycling/Disposal of Hazardous Waste Drum Inventory	non-responsive	1,557	\$155,700.00
Transportation Costs		18	\$17,658.00
Storage Areas - decontaminate floor surface - rinsate analyses		1 14	\$12,500.00 \$4,620.00
Closure-Derived Waste Management - liquid residues		13,000	\$6,500.00
Engineering - closure observation - documentation report		6 1	\$ 7,200.00 \$ 10,000.00
Sub Total			\$214,178.00
10% Contingency		1	\$21,417.80
TOTAL			\$235,595.80

N104 W13275 Donges Bay Road
Germantown, WI 53022
(262) 512-8049 Fax (262) 236-8140

PROPOSAL

Name:	KANDY SCHMIT		
Company:	BADGER DISPOSAL OF WI.		
Address:	5611 W. HEMLOCK STREET		
City	MILWAUKEE	State	WI ZIP 53223
Phone:	414-760-9175		
Fax:	414-760-9189		
Email:	kandy@badgerdisposal.com		

Job Site: _____
 Address: _____
 Address: _____
 City: MILWAUKEE
 State WI ZIP _____

[illegible]

Title: _____
Signature: _____
Title: _____
Signature: _____
Date: _____
PO # _____

TERMS: NET 30
FINANCE CHARGES: 1 1/2%
AFTER 30 DAYS.

Call: (920) 605-6128
Allan Luttinen

If scope of work changes a change order will be issued. The customer will remain liable for all actual charges incurred.

Signature: _____

Thank you for your business! Please call on us again.

MDWTP, Inc. Wayne Disposal, Inc.

Discounted Pricing Schedule For:

Badger Disposal (#1323)

Updated 4/2/09

	<u>DRUM</u>	<u>CYB</u>	<u>TON</u>	<u>GAL</u>
Non-Hazardous Waste (029L, Slud, Non, ect.)	non-responsive			
1) Non-Hazardous Solids				
2) Non-Haz Liquids and Sludges				

Characteristic Hazardous Wastes (D001, 2, 4-11, 12-43) Treat to non-haz.

- 1) D001, D002, D004-11
- 2) D012-D043 (D-Metals w/ UHC's)
- 3) Characteristic Subpart CC

non-			
non-responsive			

Listed Hazardous Wastes (F, K, P, U Coded and MI Listed) Treat to haz

- 1) Listed Metals for Stabilization
- 2) Listed Organic for ChemOx
- 3) Listed Subpart CC
- 4) Micro-encapsulation of Debris

non-			
non-responsive			

Direct Subtitle C or TSCA Landfill

- 1) Listed Waste Meeting All LDR
- 2) TSCA Soil for Landfill

non-responsive			
----------------	--	--	--

Notes:

- 1) Bulk pricing (per ton) will be charged on a yard basis for bulk density < 2000 lbs/yard
- 2) State surcharges are \$2.20/drum and \$10.00/yrd box or ton for hazardous wastes.
- 3) State surcharges are \$0.08/drum and \$0.31/yrd box or ton for non-hazardous wastes
- 4) Please call for pricing for all event work.
- 5) Rates do not include special burial charges, dig-outs, wash-outs, etc
- 6) An insurance surcharge of 1.5% will apply to all invoiced totals starting 03/01/03.
- 7) An energy surcharge will apply to disposal. This rate is adjusted quarterly based on the US Department of Labor Consumer Price Index (CPI)-Energy.

TABLE OF CONTENTS
SECTION 8
COMPLIANCE WITH CHAPTERS NR 664 AND NR 679

	Page
8.1 General Facility Standards (Subchapter B)	8-1
NR 664.0011 Identification Number	8-1
NR 664.0012 Required Notices	8-1
NR 664.0013 General Waste Analysis	8-1
NR 664.0014 Security	8-2
NR 664.0015 General Inspection Requirements	8-3
NR 664.0016 Personnel Training	8-5
NR 664.0017 General requirements for ignitable, reactive or incompatible wastes	8-6
NR 664.0018 Location Standards	8-7
NR 664.0019 Construction Quality Assurance Program	8-7
NR 664.0025 Construction Certification for a New Facility	8-7
8.2 Preparedness and Prevention (Subchapter C)	8-7
NR 664.0031 Design and Operation of Facility	8-7
NR 664.0032 Required Equipment	8-7
NR 664.0033 Testing and Maintenance of Equipment	8-8
NR 664.0034 Access to Communications or Alarm System	8-8
NR 664.0035 Required Aisle Space	8-8
NR 664.0037 Arrangements with Local Authorities	8-9
8.3 Contingency Plan and Emergency Procedures (Subchapter D)	8-9
NR 664.0051 Purpose and Implementation of Contingency Plan	8-9
NR 664.0052 Content of Contingency Plan	8-9
NR 664.0053 Copies of Contingency Plan	8-10
NR 664.0054 Amendment of Contingency Plan	8-10
NR 664.0055 Emergency Coordinator	8-10
NR 664.0056 Emergency Procedures	8-11

	Page
8.4 Manifest System (Subchapter E)	8-12
NR 664.0071 Use of Manifest System	8-12
NR 664.0072 Manifest Discrepancies	8-12
NR 664.0073 Operating Record	8-13
NR 664.0074 Availability, Retention and Disposition of Records	8-14
NR 664.0075 Annual Report	8-14
NR 664.0076 Unmanifested Waste Report	8-14
NR 664.0077 Additional Reports	8-14
8.5 Releases from Solid Waste Management Units (Subchapter F)	8-15
8.6 Closure and Long-Term Care (Subchapter G)	8-15
NR 664.0111 Closure Performance Standard	8-15
NR 664.0112 Closure plan; Amendment of Plan	8-15
NR 664.0113 Closure; Time Allowed for Closure	8-16
NR 664.0015 Disposal or Decontamination of equipment, structures and soils	8-17
NR 664.0115 Certification of Closure	8-17
8.7 Financial Requirements (Subchapter H)	8-17
NR 664.0142 Cost Estimate for Closure	8-17
NR 664.0143 Financial Assurance for Closure	8-18
8.8 Containers (Subchapter I)	8-18
NR 664.0171 Condition of Containers	8-18
NR 664.0172 Compatibility of Waste with Containers	8-18
NR 664.0173 Management of Containers	8-18
NR 664.0174 Inspections	8-18
NR 664.0175 Containment	8-19
NR 664.0176 Special Requirements for Ignitable or Reactive Waste	8-19
NR 664.0177 Special Requirements for Incompatible Wastes	8-19
NR 664.0178 Closure	8-20
NR 664.0179 Air Emission Standards	8-20
8.9 Air Emission Standards for Tanks, Surface Impoundments And Containers (Subchapter CC)	8-20
NR 664.1086 Standards: Containers	8-20

	Page
COMPLIANCE WITH NR 679 – USED OIL MANAGEMENT STANDARDS	8-23
8.10 Standards for Used Oil Generators (Subchapter C)	8-23
NR 679.20 Applicability	8-23
NR 679.21 Hazardous Waste Mixing	8-23
NR 679.22 Used Oil Storage	8-23
NR 679.23 On-site burning in space heaters	8-24
NR 679.24 Off-site Shipments	8-24
8.11 Standards for Used Oil Fuel Marketers (Subchapter H)	8-24
NR 679.70 Applicability	8-24
NR 679.71 Prohibitions	8-24
NR 679.72 On-specification used oil fuel	8-24
NR 679.73 Notification	8-24
NR 679.74 Tracking	8-25

SECTION 8
COMPLIANCE WITH CHAPTERS NR 664 and NR 679

8.1 General Facility Standards (Subchapter B)

NR 664.0011 Identification Number

The EPA Identification number for Badger Disposal is WID988580056.

NR 664.0012 Required Notices

Badger Disposal does not receive hazardous waste from a foreign source.

NR 664.0013 General Waste Analysis

A copy of Badger Disposal's Waste Analysis Plan is located in Appendix D. The Waste Analysis Plan sets forth the requirements for sampling, testing and evaluating the wastes to ensure that sufficient information is available for safe handling and to provide the means for meeting outbound specifications for waste products.

Before Badger Disposal treats, stores or disposes of any hazardous or nonhazardous wastes, Badger Disposal will obtain a chemical and physical analysis of the waste. This will be based on generator knowledge, an MSDS or analytical data provided. The data will contain all the information which must be known to treat, store or dispose of the waste.

Section 2 of the Waste Analysis Plan specifically discusses information that Badger Disposal requires from generators to assess a waste's suitability for processing into a waste derived fuel. In order to be useful as a supplied fuel, a material must have sufficient BTU content and be compatible with other types of materials accepted. Halogen content is also a factor in determining the suitability of a waste stream for processing. Each generator or broker must complete a Badger Disposal profile, their own waste identification form, or one of the waste identification forms used by brokers who represent the generator. The Waste Profile form is always completed. The waste identification form will at a minimum contain Generator Information, Waste Description, General Characteristics, RCRA Information, Viscosity, Total Suspended Solids, pH, BTU's, Flash Point, Halogens, Hazardous Characteristics and other components, Chemical Composition and Metals information. This information will assist Badger Disposal in determining if a waste is an acceptable candidate for fuel blending.

Chemical and physical samples are analyzed by a laboratory certified or registered under ch. NR 149, except for field analyses for pH, specific conductance and temperature. Analysis is

repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis will be repeated when any of the following occurs:

- Badger Disposal is notified or has reason to believe that the process or operation generating the hazardous or nonhazardous wastes has changed.

Badger Disposal has developed and follows a written waste analysis plan which describes the procedures necessary for Badger Disposal to comply with NR 664.0013 (1). Badger Disposal keeps this plan at the facility. The plan specifies all of the following:

- The parameters for which each hazardous or non-hazardous waste will be analyzed and the rationale for the selection of these parameters. A Summary of Analyses performed is located in Table 2 of the existing Waste Analysis Plan, the rationale for the selection of these parameters is located in the Waste Analysis Plan.
- Test methods which will be used to test for these parameters. Test methods are listed in Section 4 of the existing Waste Analysis Plan.
- The sampling method used to obtain a representative sample of the waste to be analyzed. Sampling methods are listed in Section 7 of the existing Waste Analysis Plan. Waste is sampled with a coliwasa or equivalent SW-846 method.
- Badger Disposal requires generators to recertify every waste stream on an annual basis.

NR 664.0014 Security

As indicated on the Current Operations Security Plan drawing #05490-SY1, located in Attachment B of this section, the Badger Disposal transfer/storage facility property is surrounded by a chain link security fence with three strand of barbed wire on top. The fence is eight feet high overall. Warning signs reading: "DANGER UNAUTHORIZED PERSONNEL KEEP OUT" are posted at each entrance to the active portion of the facility and at other locations, in sufficient numbers to be seen from any approach to the active portion. The legend is legible from a distance of 25 feet. An electronic access gate is continually monitored for entrance of unauthorized personnel. All gates are kept closed and locked during non-operating hours of the facility. Gates are kept closed during receiving hours and monitored for incoming trucks and visitors by Badger Disposal Personnel. During fuel blending operations the gates are kept closed. A gear driven operator with intercom mounted to the gate post has been installed on the main gate. Service doors to the active portion of the facility are kept locked at all times. During operating hours, all persons entering the facility are required to enter the office building and state their business to the receptionist and sign a visitor's log. In the case of waste or materials delivery trucks, the delivery will be accepted (or tentatively accepted in the case of waste deliveries) prior to being directed and/or escorted through the facility. All non complying entrants are treated as unauthorized entrants and are asked to leave the facility.

Unauthorized entrants are detected by facility personnel. During non operating hours, the fence and locked gates control unauthorized entry to the facility.

Access is controlled through the warehouse and is limited to employees and escorted visitors. There is an internal alarm system throughout the facility and office that is monitored 24 hours a day. Badger Disposal is equipped with an internal communications system capable of providing immediate notification to facility personnel of any unauthorized access. There are 2-way radios and emergency telephones in the facility capable of summoning emergency agencies including fire and police departments.

NR 664.0015 General Inspection Requirements

A copy of Badger Disposal's Inspection Schedule is located in Appendix E. This schedule describes the personnel, organization and management policies and procedures for Badger Disposal's facility. The purpose of this schedule is to minimize the possibility of an accidental release of materials which may cause or lead to, a discharge of hazardous materials to the environment or cause a threat to human health by maintaining the plant and equipment in good working order and providing a written base of experience for future refinement of waste storage activities.

Inspection procedures are used to ensure that equipment and operational areas will not fail so as to endanger public health or the environment. Inspections are conducted on a regular schedule to minimize any such risk. Badger Disposal's Inspection Schedule is based on the specific flow of the various processes. Areas covered for current operations include the following:

- Safety Equipment
- Emergency Equipment
- Security and Communication Equipment
- Loading/Unloading Areas
- Container Management Areas
- Storage and Process Areas.

Badger Disposal inspects the facility for malfunctions and deterioration, operator errors and discharges which may be causing, or may lead to, release of hazardous waste constituents to the environment or a threat to human health. Badger Disposal conducts these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

Badger Disposal has developed and follows a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices and operating and structural

equipment that are important to preventing, detecting or responding to environmental or human health hazards. This schedule is kept at the Badger Disposal facility. The Inspection Schedule identifies the types of problems which are to be looked for during the inspection.

The frequency of inspections are based on the rate of deterioration of the equipment utilized and the probability of an environmental or human health incident if the deterioration, malfunction or any operator error goes undetected between inspections. Areas subject to spills are inspected daily.

Badger Disposal will remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action will be taken immediately.

Badger Disposal records inspections in an inspection log and keeps these records for at least 3 years from the date of the inspection. These records include:

- The date and time of inspection
- The name of the inspector
- A notation of the observations made and the date and nature of any repairs or other remedial actions.

The Inspection log identifies the following:

- Equipment or area to be inspected
- Observations or checks which should be conducted
- Date and time of the inspection
- Name of the inspector
- Notations of any observations made

Table 3-1 in the Inspection Schedule summarizes the area/equipment needing to be inspected as well as the items to check, type of concerns and minimum frequency for inspections. Inspection logs located in Appendix A of the Inspection Schedule are used to identify and record discrepancies found on any pieces of critical equipment within the facility for which failure could lead to the endangerment of public health or to the surrounding environment.

Prior to beginning fuel blending operations, the integrity of the tanker truck is inspected as well as the condition of the tanker pump, filter, grounding clamps and hoses. During the transfer of waste, hoses, grounding clamps, the filter and the pump are monitored by personnel to ensure that all of the equipment is functioning properly. After the tanker truck is filled a visual

inspection of the truck is taken to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking. A Tanker Truck and Loading Area Inspection Log is located in Appendix A of the facility Inspection Logs. This log will be completed for every outgoing fuel blending shipment. Logs are maintained at the facility for a period of at least three years.

NR 664.0016 Personnel Training

A copy of Badger Disposal's Personnel Training Program is located in Appendix F. The purpose of this Training Program is to prevent personal injury, property damage and environmental degradation arising from the release of hazardous waste into the environment. Badger Disposal's Personnel Training Program is designed to ensure that facility Personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems.

All facility personnel will successfully complete a classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures Badger Disposal's compliance with the requirements of NR 664.0016. Badger Disposal ensures that this training program includes all of the elements described in the document required under sub. (4)(c).

Badger Disposal's training program is directed by a person trained in hazardous waste management procedures, and includes instructions which teach facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

The training program is designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including:

- Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment.
- Response to fires or explosions.
- Shutdown of operations.

Training at Badger Disposal is an ongoing process. This training program has been established to make facility employees aware of the hazards in the work place, and how to conduct work in a safe manner.

All facility personnel are required to successfully complete the training program within 6 months after the date of their employment. No employee is allowed to perform unsupervised work at

Badger Disposal until they have successfully completed the training program. All facility personnel are required to participate in the annual training program review to maintain proficiency, to learn new techniques and procedures, to become familiar with new regulatory requirements, and to reinforce safety and quality consciousness.

Review of Fuel Blending operational procedures is in integral part of the facility annual training program. Appendix C of the Personnel Training Program contains a Process Personnel Training Program Outline. Fuel Blending procedures are reviewed under item number 5 – Facility Operation. Items reviewed include proper protective clothing and equipment necessary during fuel blending operations, proper drum staging, drum handling, drum opening, pumping and closing procedures, proper operation of forklifts, proper operation of tanker truck hose and wand, tanker truck inspections prior to filling and after filling. Also reviewed during this training is preventative maintenance of equipment used in the fuel blending operations and shutdown procedures .

The NR 664 standards are reviewed during each annual training session as part of item 4 of the Process Personnel Training Program Outline.

NR 664.0017 General requirements for ignitable, reactive or incompatible wastes

Containers holding reactive, ignitable, and incompatible wastes are stored in the warehouse building in a storage location that is located 50 feet from the property line. The tanker truck used for fuel blending operations will be located at least 50 feet from the property line. Badger will take precautions to prevent the ignition of ignitable or reactive wastes. These procedures include the segregation of incompatible materials and separation of materials from ignition sources such as open flames, hot surfaces, friction heat, sparks (static, electrical or mechanical), spontaneous ignition and radiant heat. To prevent sources of external ignition, explosion proof electrical equipment will be used in all ignitable storage areas. Badger Disposal does not mix incompatible wastes. It is Badger's policy not to allow smoking except in designated non-operational areas such as office areas. Badger has "No Smoking" signs in highly visible areas of the facility and main entrances.

Badger Disposal will take precautions to prevent reactions which do any of the following:

- Generate extreme heat or pressure, fire or explosions or violent reactions.
- Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health or environment.
- Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.
- Damage the structural integrity of the facility.

- Through other like means threaten human health or the environment.

NR 664.0018 Location Standards

The Badger Disposal facility is not located in a floodplain, a wetland or critical habitat. Noncontainerized or bulk liquid hazardous waste will not be placed in any salt dome formation, salt bed formation, underground mine or cave.

NR 664.0019 Construction Quality Assurance Program

Badger Disposal does not have a surface impoundment, waste pile or landfill.

NR 664.0025 Construction Certification for a New Facility

For all newly constructed treatment or storage facilities, Badger Disposal will submit a written statement to the department, within 15 days after the construction is completed, certifying that the facility was constructed in substantial compliance with the approved feasibility and plan of operation report.

8.2 Preparedness and Prevention (Subchapter C)**NR 664.0031 Design and Operation of Facility**

Badger Disposal is designed, constructed, maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water which could threaten human health or the environment.

NR 664.0032 Required Equipment

Badger Disposal is equipped with all of the following

- Internal communications and alarm system capable of providing immediate emergency instruction to facility personnel.
- Hand held 2-way radios capable of summoning emergency assistance from local police departments, fire departments and state/local emergency response teams.
- Portable fire extinguishers, an AFFF foam extinguishing system, spill control equipment and decontamination equipment
- Water that is at adequate volume and pressure to supply water hose streams, foam equipment, sprinklers or water spray systems.

NR 664.0033 Testing and Maintenance of Equipment

All facility communications and alarm systems, fire protection equipment, spill control equipment and decontamination equipment are tested and maintained as necessary to assure its proper operation in time of emergency.

NR 664.0034 Access to Communications or Alarm System

Whenever hazardous waste is being handled, all personnel involved in the operation will have immediate access to the internal alarm and emergency communication devices both directly and through visual/voice contact with another employee.

All employees have immediate access to telephones capable of summoning external emergency assistance.

The Badger Disposal facility is equipped with an alarm system. This system is used in the case of an emergency or emergency drill. The alarm allows instruction and information to be supplied to plant personnel.

Badger utilizes three forms of communications in the event of an emergency. These include telephones, radios and an alarm system. Two-way radios are carried by all Badger supervisors. In the event of an emergency, any or all of these devices will be used to alert employees and notify proper personnel, agencies and/or emergency response teams.

Hand held and portable fire extinguishers are located throughout the warehouses and office areas which would be used, when necessary, in the case of an emergency. In addition to these fire extinguishers, the warehouse buildings are equipped with an automatic aqueous film forming foam (AFFF) fire suppression system.

There is a fire hydrant located to the North of the main access gate. The City of Milwaukee has the responsibility of maintaining this fire hydrant in operable condition. Emergency Equipment Layouts are located in Attachment B of Section 7.

NR 664.0035 Required Aisle Space

Badger maintains aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility operations in an emergency. Specific aisle spacing maintained at the Badger facility include

three-foot aisle spacing between rows of drums and at least six-foot wide aisles at all exit routes to all doorways.

The three-foot aisle spacing of hazardous waste drums allows direct access to each and every drum in case of emergency. It is Badger's policy to keep aisle ways clear at all times. Should a drum be noted to be leaking, a hand drum dolly will be used to remove the drum from the storage area. The three-foot aisle spacing provides ample room to wheel the dolly down an aisle and remove a drum from any given row of drums.

NR 664.0037 Arrangements with Local Authorities

Badger Disposal has made arrangements to familiarize police, fire departments, emergency response teams and the local hospital with the layout of the facility, properties of hazardous waste handled at the facility and its associated hazards, places where facility personnel would normally be working, entrances to and evacuation routes. The local hospital, fire department and police department have received copies of Badger Disposal's Contingency Plan and receive updates to the plan anytime the plan changes.

8.3 Contingency Plan and Emergency Procedures (Subchapter D)

NR 664.0051 Purpose and implementation of contingency plan

Badger Disposal has a contingency plan for its facility. A copy of this Contingency Plan is located in Appendix I of Section 7 of this Feasibility and Plan of Operation Report. This plan has been designed to minimize hazards to human health or the environment from fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water

Provisions of this plan are carried out immediately whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

NR 664.0052 Content of contingency plan

Section 4 of the Contingency Plan describes the actions facility personnel will take to comply with ss. NR 664.0051 and 664.0056 in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water at Badger Disposal. Section 3, and 3.4 of the Contingency Plan describes arrangements agreed to by local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services. Table 2 of the Contingency Plan

lists names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator, this list is kept up to date. A primary emergency coordinator and other personnel are listed in the order in which they will assume responsibility as alternatives.

Section 5 of the Contingency Plan includes a list of all emergency equipment at the facility and where this equipment is required. This list is kept up to date. Table 6 of the Contingency Plan also includes the location and a physical description of each item on the list, and an outline of its capabilities.

Section 6 of the Contingency Plan includes an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. A general site evacuation will be announced by activating the alarm system (i.e., air horn). Figure 1 of the Contingency Plan shows the evacuation routes that employees are required to utilize.

NR 664.0053 Copies of contingency plan

A copy of the Contingency Plan and all revisions are maintained at Badger Disposal. Copies are also submitted to all local police departments, hospitals and state and local emergency response teams that may be called upon to provide emergency services.

NR 664.0054 Amendment of contingency plan

The Contingency Plan is reviewed and immediately amended whenever any of the following occurs:

- The facility license is revised.
- The plan fails in an emergency.
- The Badger Disposal facility changes in its design, construction, operation, maintenance or other circumstances in a way that materially increases the potential for fires, explosions or releases of hazardous waste or hazardous waste constituents or changes the response necessary in an emergency.
- The list of emergency coordinators changes.
- The list of emergency equipment changes.

NR 664.0055 Emergency coordinator

At all times, there is at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures. This emergency coordinator is thoroughly familiar with all aspects of Badger Disposal's Contingency Plan, all operations and activities at Badger Disposal, the location and characteristics of waste handled, the location of all

records within the facility and the facility layout. This person has the authority to commit the resources needed to carry out the Contingency Plan.

NR 664.0056 Emergency procedures

Whenever there is an imminent or actual emergency situation, the emergency coordinator or a designee, when the emergency coordinator is on call, will immediately do all of the following:

- Activate the internal Badger Disposal alarms or communication systems, where applicable to notify all facility personnel.
- Notify appropriate state or local agencies with designated response roles if their help is needed.
- Whenever there is a release, fire or explosion, the emergency coordinator will immediately identify the character, exact source, amount and aerial extent of any released materials. This may be done by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- Concurrently, the emergency coordinator will assess possible hazards to human health or the environment that may result from the release, fire or explosion. This assessment will consider both direct and indirect effects of the release, fire or explosion. The effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and/or heat-induced explosions.

If the emergency coordinator determines that Badger Disposal has had a release, fire or explosion which could threaten human health, or the environment, outside the facility, that person will report the findings according to all of the following:

- If the emergency coordinator's assessment indicates that evacuation of local areas may be advisable, the emergency coordinator will immediately notify appropriate local authorities. The emergency coordinator will be available to help appropriate local officials decide whether local areas should be evacuated.
- The emergency coordinator will immediately notify national response center at 800-424-8802 and the division of emergency government at 800-943-0003. The report will include all of the following:
 - Name and telephone number of the reporter.
 - Name and address of the facility.
 - Time and type of incident.
 - Name and quantity of material involved, to the extent known.
 - The extent of injuries, if any.

- The possible hazards to human health, or the environment, outside the facility

During an emergency, the emergency coordinator will take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur or spread to other hazardous waste at Badger Disposal. These measures will include, where applicable, stopping processes and operations, collecting and containing released waste and removing or isolating containers.

If Badger Disposal stops operations in response to a fire, explosion or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate.

Immediately after an emergency, the emergency coordinator will provide for treating, storing or disposing of recovered waste, contaminated soil or surface water or any other material that results from a release, fire or explosion at the facility.

8.4 Manifest System (Subchapter E)

NR 664.0071 Use of Manifest System

Upon receipt of hazardous waste accompanied by a manifest or bill of lading, Badger Disposal will:

- Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest or bill of lading was received.
- Note any significant discrepancies in the manifest or bill of lading on each copy of the manifest.
- Immediately give the transporter at least one copy of the signed manifest or bill of lading.
- Within 30 days after the delivery will send one copy of the manifest to the generator, send one copy of the manifest to the department.
- Retain at Badger Disposal a copy of each manifest and bill of lading for at least 3 years from the date of delivery.
- Pay a manifest fee for each manifest submitted.

Whenever a shipment of hazardous waste is initiated from Badger Disposal, the facility will comply with the requirements of ch. NR 662.

NR 664.0072 Manifest Discrepancies

Upon discovering a significant discrepancy, Badger Disposal will attempt to reconcile the discrepancy with the waste generator or transporter. If the discrepancy is not resolved with 15

days after receiving the waste, Badger Disposal will immediately submit to the department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

NR 664.0073 Operating Record

Badger Disposal will keep a written operating record at the facility. All of the following information will be recorded as it become available and maintained in the operating record until closure of the facility:

- A description and the quantity of each hazardous waste received, the methods and dates of its treatment, storage or disposal at Badger Disposal.
- The location of each hazardous waste within the facility and the quantities at each location cross referenced to specific manifest document numbers.
- Records and results of waste analyses and waste determinations performed.
- Summary reports and details of all incidents that require implementing the contingency plan.
- Records and results of inspections (for 3 years)
- Monitoring, testing or analytical data and corrective actions.
- Notices to generators as specified in NR 664.0012(2)
- All closure cost estimates.
- A certification annually that Badger Disposal has a program in place to reduce the volume and toxicity of hazardous waste generated at the facility to the degree determined by Badger Disposal to be economically practicable, and that the method of treatment, storage or disposal is that practicable method currently available to Badger Disposal which minimizes the present and future threat to human health and the environment.
- Record of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units.
- For an off-site treatment facility, a copy of the notice required by the generator or the owner or operator, as specified in NR 668.07.
- For an on-site treatment facility, the information contained in the notice required by the generator or owner or operator, as specified in NR 668.07.
- For an off-site storage facility, a copy of the notice required by the generator or the owner or operator, as specified in NR 668.07.
- For an on-site storage facility, the information contained in the notice required by the generator or the owner or operator, as specified in NR 668.07.

NR 664.0074 Availability, Retention and Disposition of Records

All records, including plans, will be furnished upon request and made available at all reasonable times for inspection by any officer, employee or representative of the department.

NR 664.0075 Annual Report

Badger Disposal will prepare and submit an annual report to the department by March 1 of every year. The annual report will cover facility activities during the previous calendar year and will at a minimum, include the following:

- The EPA identification number, name and address of Badger Disposal.
- The calendar year covered by the report.
- For off-site facilities, the EPAID number of each hazardous waste generator from which Badger Disposal received a hazardous waste during the year.
- A description and the quantity of each hazardous waste received during the year. For off-site facilities, this information will be listed by EPAID number of each generator.
- The method of treatment, storage or disposal for each hazardous waste.
- The most recent closure cost estimate.
- A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years.
- The certification signed by the owner of Badger Disposal or an authorized representative.

NR 664.0076 Unmanifested Waste Report

Badger Disposal does not accept any hazardous waste from an off-site source unless accompanied by a Uniform Hazardous Waste Manifest or Bill of Lading.

NR 664.0077 Additional Reports

In addition to submitting the annual reports, Badger Disposal will also report all of the following to the department:

- Releases, fires and explosions.
- Facility closures.
- Other information as required by subchs. F, K to N, AA, BB and CC.

8.5 Releases From Solid Waste Management Units (Subchapter F)

Because of the engineered secondary containment around storage and processing areas in the facility, the chance of an accidental leak or spill that could escape from the site and enter surface or groundwater is negligible. Such a release incident has not occurred during the history of the existing facility. Badger Disposal has several policies in place to further prevent groundwater impacts. These policies include runoff prevention, emergency spill procedures and precipitation management policies. Area water supply wells draw groundwater from the sandstone and Niagara dolomite aquifers. The sandstone aquifer is most frequently used in the area and is overlain by Maquoketa Shale which acts as a confining layer. The Niagara aquifer is overlain by 50 to 100 feet of glacial till - mainly clay. (Foley 1953) Thus, in the unlikely event of a spill or release escaping the containment structures, potential for contamination of groundwater resources would be minimal.

Reference: Foley, 1953: Groundwater Conditions in the Milwaukee-Waukesha area Wisconsin, Geological Survey Water Supply Paper 1229, United States Government Printing Office, Washington.

8.6 Closure and Long-Term Care (Subchapter G)

A copy of Badger Disposal's Closure Plan is located in Appendix J. A Closure Cost Estimate - Table 1 for current operations is located in Attachment D of Section 7.

NR 664.0111 Closure performance standard

Badger Disposal will close its facility in a manner that does all of the following:

- Minimizes the need for further maintenance.
- Complies with the closure requirements NR 664 subchapter G including, but not limited to, the requirements of ss. NR 664.0178, 664.0197, 664.0228, 664.0258, 664.0310, 664.0351, 664.0601 to 664.0603 and 664.1102.

NR 664.0112 Closure plan; amendment of plan

Badger Disposal has a written closure plan. Badger Disposal has an expected life of 50 years. The entire facility will operate until closure. Therefore, no partial closure is anticipated. This plan identifies steps necessary to perform final closure of Badger Disposal at any point in its active life. The Closure Plan includes:

- A description of how each hazardous waste management unit will be closed.
- A description of how final closure of the facility will be conducted. This description identifies the maximum extent of the operations which will be unclosed during the active life of the facility.
- An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during final closure including methods for removing, transporting, treating, storing or disposing of all hazardous wastes, and identification of the types of off-site hazardous waste management units to be used.
- A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure, including procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination required to satisfy the closure performance standard.
- A detailed description of any other activities necessary during the closure period to ensure that final closure satisfies the closure performance standards.
- A schedule for final closure of the facility. The schedule includes the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure.

Badger Disposal will submit a written notification of or request for an operating license modification to authorize any changes in operating plans, facility design or the approved closure plan. The written notification or request will include a copy of the amended closure plan for review or approval. This notification or request will be submitted at least 60 days prior to the proposed change or no later than 60 days after an unexpected event has occurred which has affected the Closure Plan.

Badger Disposal will notify the department in writing of the intent to close the facility at least 180 days prior to its final closure. The date when Badger Disposal "expects to begin closure" will be no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous wastes.

NR 664.0113 Closure; time allowed for closure

Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, or the final volume of non-hazardous wastes Badger Disposal will remove from the facility all hazardous wastes in accordance with the approved closure plan.

NR 664.0114 Disposal or decontamination of equipment, structures and soils

During the final closure periods, all contaminated equipment, structures and soils will be properly disposed of or decontaminated. Badger Disposal will handle all of the waste generated during closure in accordance with all applicable requirements of ch. NR 662.

NR 664.0115 Certification of closure:

Within 60 days of completion of final closure, Badger Disposal will submit to the department, by registered mail, a certification that the facility has been closed in accordance with the specifications in the approved Closure Plan. The certification will be signed by the owner and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification will be furnished to the department upon request.

8.7 Financial Requirements (Subchapter H)**NR 664.0142 Cost Estimate for closure:**

Badger Disposal has a detailed written estimate, in current dollars, of the cost of closing our facility in accordance with the requirements in ss. NR 664.0111 to 664.0115. A copy of the facility Closure Plan is located in Appendix J, and a copy of the closure costs for current operations are located in Attachment D of Section 7. This estimate equals the cost of final closure at the point in Badger's active life when the extent and manner of operations would make closure the most expensive. The closure cost estimate is based on the costs to Badger Disposal of hiring a third party to close the facility. The closure cost estimate does not incorporate any salvage value that may be realized with the sale of hazardous wastes, or non-hazardous wastes, facility structures or equipment, land or other assets associated with Badger Disposal at the time of partial or final closure.

During the active life of the facility, Badger Disposal will adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument used.

During the active life of the facility, Badger Disposal will revise the closure cost estimate no later than 30 days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure.

Badger Disposal will keep the latest closure cost estimate and, when adjusted, the latest adjusted closure cost estimate at the facility during the operating life of the facility

NR 664.0143 Financial assurance for closure:

A copy of the letter of credit covering closure costs for Badger Disposal is located in Appendix J.

8.8 Containers (Subchapter I)**NR 664.0171 Condition of Containers**

If a container holding hazardous waste is not in good condition or if it begins to leak, Badger Disposal will transfer the waste from its original container to a container that is in good condition. If a leak develops in the tanker truck during fuel blending operations the waste will be transferred into 55 gallon drums and/or totes. Depending upon the circumstances, Badger Disposal will use new containers or transfer the waste back into the containers from which it was pumped. Badger Disposal maintains a sufficient supply of 55 gallon drums and totes at all times.

NR 664.0172 Compatibility of Waste with Containers

Badger Disposal will use containers made of or lined with materials which will not react with and are otherwise compatible with the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

NR 664.0173 Management of Containers

A container holding hazardous waste will always be closed during storage, except when it is necessary to add or remove waste. A container holding hazardous waste will not be opened, handled or stored in a manner which will rupture the container or cause it to leak.

NR 664.0174 Inspections

At least weekly, Badger Disposal will inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system which may be caused by corrosion or other factors.

Prior to beginning fuel blending operations, the integrity of the tanker truck is inspected as well as the condition of the tanker pump, filter, grounding clamps and hoses. During the transfer of waste, hoses, grounding clamps, the filter and the pump are monitored by personnel to ensure that all of the equipment is functioning properly. After the tanker truck is filled, a visual inspection of the truck is taken to make certain that all hoses are put away and capped, valves are closed and capped and that the tanker is not leaking.

NR 664.0175 Containment

(1) Container storage areas have a containment system that is designed and operated in accordance with sub. (2), except as otherwise provided by sub. (3).

(2) A containment system has been designed and is operated to meet all of the following requirements:

- Containers are stored inside on a concrete floor which is free of crack or gaps and is impervious to contain leaks, and spills until the collected material is detected and removed.
- Containers are stored on pallets to protect them from contact with accumulated liquids.
- The containment system has sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.
- Run-on into the containment system is prevented since the entire warehouse is bermed.

During fuel blending operations, a 6,000 gallon tanker trailer is backed into the warehouse for loading. The containment capacity for the North Drum Storage Warehouse is 11,379 gallons; therefore, providing sufficient containment for the volume of the largest container which would be the tanker trailer. During bulking activities in the 2007 Warehouse Addition, a 6,000 gallon tanker trailer is backed into the warehouse for loading in Section B. The containment capacity for this section of the addition is 6,000 gallons, therefore providing sufficient containment for the volume of the largest container which would be the tanker trailer.

NR 664.0176 Special Requirements for Ignitable or Reactive Waste

Containers holding ignitable or reactive waste will be located at least 50 feet from Badger Disposal's property line.

NR 664.0177 Special requirements for incompatible wastes

Incompatible wastes, or incompatible wastes and materials will not be placed in the same container. Hazardous waste will not be placed in an unwashed container that previously held an incompatible waste or material. A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers will be separated from the other material or protected from them by means of a dike, berm, wall or other device.

NR 664.0178 Closure

At closure, all containers of hazardous waste and hazardous waste residues will be removed from the warehouses and containment systems. Remaining containers, equipment, floors, containment pallets and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed.

NR 664.0179 Air emission standards

Badger Disposal will manage all hazardous waste placed in a container in accordance with the applicable requirements of subchs. CC.

**8.9 Air Emission Standards for Tanks, Surface Impoundments and Containers
(Subchapter CC)****NR 664.1086 Standards: containers**

Drums and totes of hazardous waste that are received at Badger Disposal meet the applicable U.S. Department of Transportation regulations on packaging hazardous material for transportation. Containers are inspected when they arrive to make certain they are sealed and to make certain they remain closed when in storage. All containers are equipped with a cover and closure device that forms a continuous barrier over the container opening such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps or other open spaces into the interior of the containers. The containers are covered at all times when they are in storage. Sampling of containers and removal of container contents occurs through the bore holes on the drum lid via insertion of a drum pump. Transfer of hazardous waste in or out of a container using Container Level 2 controls is conducted in a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive or other hazardous materials. Badger Disposal uses a submerged-fill pipe to load liquids into level 2 containers. Level 2 containers are clearly marked to avoid potential mix-up with Level 1 containers.

Containers, their covers and closure devices are visually inspected to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. Container visual inspections occur on or before the date that the container is accepted at Badger Disposal.

When a defect is detected in for a container, cover or closure device, Badger Disposal will overpack the container immediately. If a leak develops in the tanker truck during fuel blending

operations the waste will be transferred into 55 gallon drums and/or totes. Depending upon the circumstances, Badger Disposal will use new containers or transfer the waste back into the containers from which it was pumped. Badger Disposal maintains a sufficient supply of 55 gallon drums and totes at all times.

Written records of inspections, which include procedures regarding containers that do not meet applicable U.S. DOT regulations, are maintained at Badger Disposal. A copy of the Inspection Schedule is located in Appendix E.

Whenever a hazardous waste is in a container using Container Level 2 controls, Badger Disposal will install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

1. Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:
 - a. In the case when the container is filled to the intended final level in one continuous operation, Badger Disposal will promptly secure the closure devices in the closed position and install all covers, as is applicable to the container, upon conclusion of the filling operation.
 - b. In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, Badger Disposal will promptly secure the closure devices in the closed position and install covers, as is applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.
2. Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:
 - a. An empty container may be open to the atmosphere at any time.
 - b. In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, Badger Disposal will promptly secure the closure devices in the closed position and install covers, as is applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person

performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

3. Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste such as times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container.. Following completion of the activity, Badger Disposal will promptly secure the closure device in the closed position or reinstall the cover, as is applicable to the container.
4. Spring loaded, pressure-vacuum relief valves, conservation vents or similar types of pressure relief devices which vent to the atmosphere will be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens will be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by Badger Disposal based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices or other requirements for the safe handling of flammable, ignitable, explosive, reactive or hazardous materials.

Badger Disposal will inspect containers using Container Level 2 controls and their covers and closure devices as follows:

1. In the case when a hazardous waste already is in the container at the time Badger Disposal first accepts possession of the container and the container is not emptied within 24 hours after the container arrives at our facility, Badger Disposal will visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, Badger Disposal will repair the defect.
2. In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, Badger Disposal will visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, Badger Disposal will repair the defect.
3. When a defect is detected for the container, cover or closure devices, Badger Disposal will make first efforts at repair of the defect no later than 24 hours after detection, and repair will be completed as soon as possible but no later than 5 calendar days after detection. If repair of a

defect cannot be completed within 5 calendar days, then the hazardous waste will be removed from the container and the container will not be used to manage hazardous waste until the defect is repaired

COMPLIANCE WITH NR 679 – USED OIL MANAGEMENT STANDARDS

8.10 Standards for Used Oil Generators (Subchapter C)

NR 679.20 Applicability

Badger Disposal has installed two boilers in the 2009 Lab Pack building that will be utilized to heat all three warehouse spaces. On-spec used oil will be burned in these boilers. Badger Disposal will be the first to claim that used oil that is to be burned for energy recovery in these boilers meets the used oil fuel specifications in s. NR 679.11. Badger Disposal will also comply with Subchapter J – Standards for Used Oil Fuel Marketers.

NR 679.21 Hazardous waste mixing

Badger Disposal will not be mixing used oil with hazardous waste.

NR 679.22 Used oil storage

Badger Disposal will not store used oil in units other than tanks, containers or units regulated under ch NR 664 or 665.

Containers used to store used oil will be in good condition (no severe rusting, apparent structural defects of deterioration) and will have no visible leaks. Containers used to store used oil will be labeled with the words “Used Oil”.

Upon detection of a release of used oil to the environment, Badger Disposal will perform all of the following cleanup steps:

- Stop the release.
- Contain the released used oil.
- Clean up and properly manage the released used oil and other materials.
- If necessary, repair or replace any leaking used oil storage containers prior to returning them to service.

NR 679.23 On-site burning in space heaters

Badger Disposal will not be burning used oil in space heaters.

NR 679.24 Off-site shipments

Badger Disposal will ensure that used oil is transported only by transporters who have obtained EPD identification numbers.

8.11 Standards for Used Oil Fuel Marketers (Subchapter H)

NR 679.70 Applicability

Badger Disposal will be a used oil fuel marketer because we will be the first to claim that the used oil that is to be burned for energy recovery meets the used oil fuel specifications in s. NR 679.11.

NR 679.71 Prohibitions

Badger Disposal will only initiate a shipment of off-specification used oil to a used oil burner who has and EPA identification number and burns the used oil in an industrial furnace or boiler identified in s. NR 679.61 (1).

NR 679.72 On-specification used oil fuel

Badger Disposal will determine that used oil that is to be burned for energy recovery on site meets the fuel specifications of s. NR 679.11 by performing analysis or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.

Badger Disposal will keep copies of analysis of the used oil (or other information used to make the determination) for 3 years.

NR 679.73 Notification

Badger Disposal's EPA ID# is WID988580056. A revised EPA Form 8700-23 is being submitted with this modification indicating that Badger Disposal is a Used Oil Fuel Marketer.

NR 679.74 Tracking

Badger Disposal will keep a record of each shipment of used oil that is to be burned for energy recovery. Records will include all of the following information:

- The name and address of the facility receiving the shipment.
- The quantity of used oil fuel delivered.
- The date of the shipment or delivery.
- A cross-reference to the record of used oil analysis or other information used to make the determination that the oil meets the specification as required under s. NR 679.72 (1)

These records will be maintained for at least 3 years.

APPENDIX A

*PART A APPLICATION
EPA NOTIFICATION OF HAZARDOUS WASTE ACTIVITY*

Revised August

SEND COMPLETED FORM TO: The Appropriate State or EPA Regional Office.	United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM		
1. Reason for Submittal (See instructions on page 14.) MARK ALL BOX(ES) THAT APPLY	Reason for Submittal: <input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities) <input checked="" type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information) <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application <input type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #____) <input type="checkbox"/> As a component of the Hazardous Waste Report		
2. Site EPA ID Number (page 15)	EPA ID Number W I D 9 8 8 5 8 0 0 5 6		
3. Site Name (page 15)	Name: Badger Disposal of WI., Inc.		
4. Site Location Information (page 15)	Street Address: 5611 W. Hemlock Street City, Town, or Village: Milwaukee State: WI County Name: Milwaukee Zip Code: 53223		
5. Site Land Type (page 15)	Site Land Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
6. North American Industry Classification System (NAICS) Code(s) for the Site (page 15)	A. 2 6 2 1 1 2	B. _____	
	C. _____	D. _____	
7. Site Mailing Address (page 16)	Street or P. O. Box: 5611 West Hemlock Street City, Town, or Village: Milwaukee State: Wisconsin Country: USA Zip Code: 53223		
8. Site Contact Person (page 16)	First Name: Henry MI: J	Last Name: Krier	
	Phone Number: 414-760-9175 Extension: 224		Email address: henry@badgerdisposal.com
9. Operator and Legal Owner of the Site (pages 16 and 17)	A. Name of Site's Operator: Henry J. Krier Date Became Operator (mm/dd/yyyy): 1/31/03 Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other B. Name of Site's Legal Owner: Badger Investment Realty, LLC Date Became Owner (mm/dd/yyyy): 1/31/03 Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		

9. Legal Owner (Continued) Address	Street or P. O. Box: 5611 West Hemlock Street	
	City, Town, or Village: Milwaukee	
	State: WI	
	Country: USA	Zip Code: 53223

10. Type of Regulated Waste Activity

Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 18 to 21.)

A. Hazardous Waste Activities

Complete all parts for 1 through 6.

Y ☒ N ☐ 1. Generator of Hazardous Waste

If "Yes", choose only one of the following - a, b, or c.

- ☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.)
of non-acute hazardous waste; or
- ☐ b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.)
of non-acute hazardous waste; or
- ☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo.)
of non-acute hazardous waste

In addition, indicate other generator activities.

Y ☐ N ☒ d. United States Importer of Hazardous WasteY ☐ N ☒ e. Mixed Waste (hazardous and radioactive) GeneratorY ☐ N ☒ 2. Transporter of Hazardous WasteY ☒ N ☐ 3. Treater, Storer, or Disposer ofHazardous Waste (at your site) Note:
A hazardous waste permit is required for
this activity.Y ☒ N ☐ 4. Recycler of Hazardous Waste (at your
site)Y ☐ N ☒ 5. Exempt Boiler and/or Industrial
Furnace

If "Yes", mark each that applies.

- ☐ a. Small Quantity On-site Burner
Exemption
- ☐ b. Smelting, Melting, and Refining
Furnace Exemption

Y ☐ N ☐ 6. Underground Injection Control

B. Universal Waste Activities

- Y ☒ N ☐ 1. Large Quantity Handler of Universal Waste (accumulate
5,000 kg or more) [refer to your State regulations to
determine what is regulated]. Indicate types of universal
waste generated and/or accumulated at your site. If "Yes",
mark all boxes that apply:

	Generate	Accumulate
a. Batteries	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Thermostats	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>

Y ☐ N ☐ 2. Destination Facility for Universal Waste

Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

Mark all boxes that apply.

Y ☐ N ☒ 1. Used Oil Transporter

If "Yes", mark each that applies.

- ☐ a. Transporter
- ☐ b. Transfer Facility

Y ☐ N ☒ 2. Used Oil Processor and/or Re-refiner
If "Yes", mark each that applies.

- ☐ a. Processor
- ☐ b. Re-refiner

Y ☐ N ☒ 3. Off-Specification Used Oil BurnerY ☒ N ☐ 4. Used Oil Fuel Marketer

If "Yes", mark each that applies.

- ☐ a. Marketer Who Directs Shipment of
Off-Specification Used Oil to
Off-Specification Used Oil Burner
- ☒ b. Marketer Who First Claims the
Used Oil Meets the Specifications

11. Description of Hazardous Wastes (See instructions on page 22.)

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

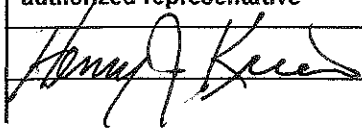
D001	D002	D003	D004	D005	D006	D007
D008	D009	D010	D011	D012	D013	D014
D015	D016	D017	D018	D019	D020	D021

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.

12. Comments (See instructions on page 22.)

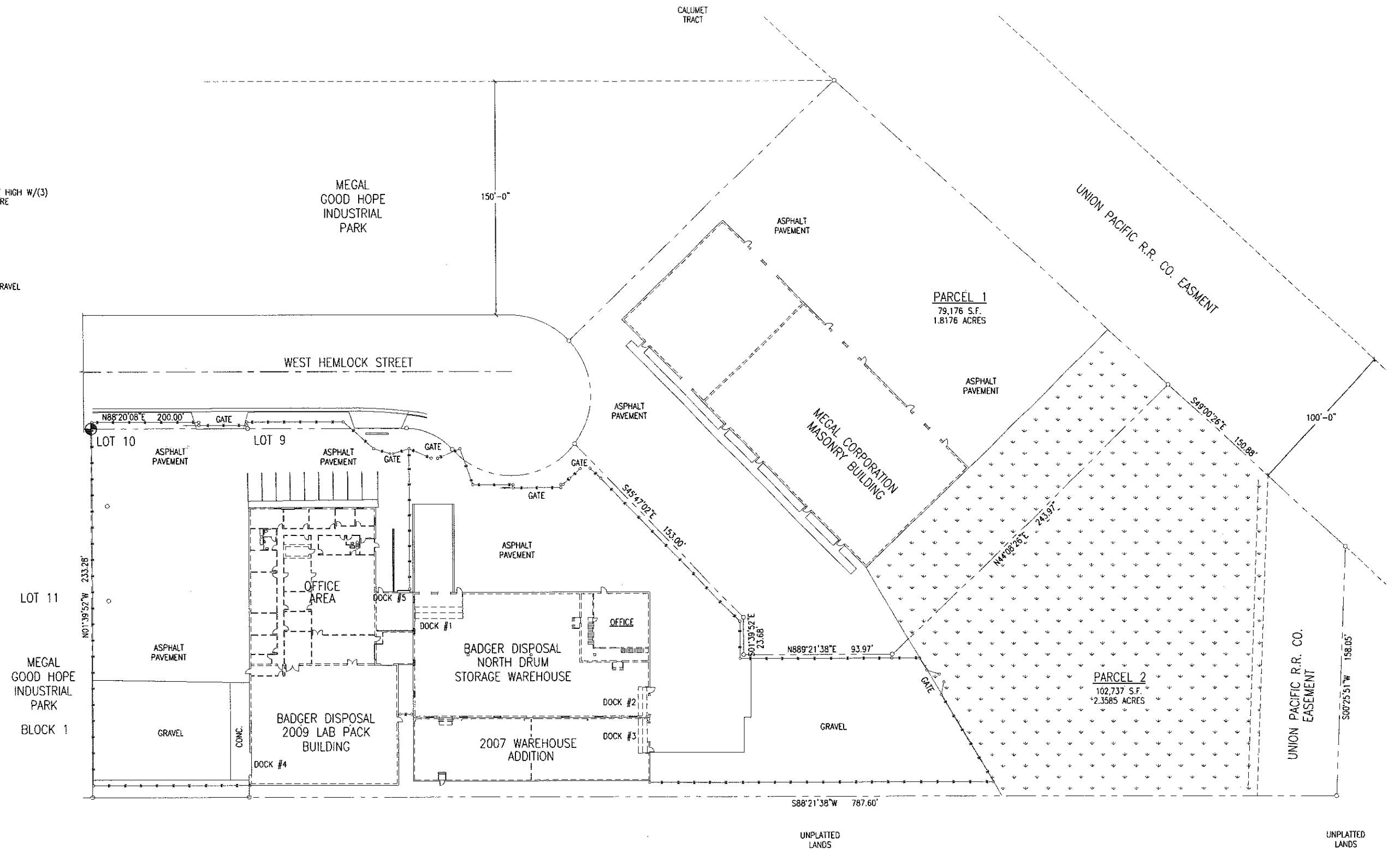
See attached for additional waste codes

13. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all operator(s) and owner(s) must sign (see 40 CFR 270.10 (b) and 270.11). (See instructions on page 22.)

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	Henry J. Krier, President	7/31/09

LEGEND

- PUBLIC LIGHT POLE
- SECURITY FENCE 6'-0" HIGH W/(3) STANDS OF BARBED WIRE
- SWING GATE (MANUAL)
- ELECTRIC GATE
- PROPERTY LINE
- UNPAVED GRASS OR GRAVEL



CURRENT OPERATIONS

SCALE: 1" = 30'-0"

**SPECTRUM
ENGINEERING
INCORPORATED**

262-783-7725
FAX 262-783-7726
19395 West Capitol Drive,
Brookfield, Wisconsin 53045

THIS DRAWING, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, REMAINS THE PROPERTY OF SPECTRUM ENGINEERING INCORPORATED. ANY CHANGES, REPRODUCTION, OR UNAUTHORIZED USE IN WHOLE OR IN PART, FOR OTHER PROJECTS IS PROHIBITED UNLESS EXPRESSLY APPROVED BY SPECTRUM ENGINEERING INCORPORATED.

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	REVISION
2	6/1/09	J.M.N.	ADDED PURCHASED PROPERTY TO WEST PER PROJECT NO. 08740.
1	10/11/07	J.M.N.	ADDED 2007 WAREHOUSE ADDITION PER PROJECT NO. 07649.

DRAWN BY: S.A.M.	CHECKED BY: BADGER
DESIGNED BY: J.M. NOLL, P.E.	
PROJECT MANAGER: R.B. SMITS, P.E.	



Badger Disposal of WI, Inc.
5611 West Hemlock Street
Milwaukee, WI 53223

**BADGER DISPOSAL - MILWAUKEE FOR
CURRENT OPERATIONS**

DRAWING NUMBER:	05490-OV1
DATE:	10/11/07
PROJECT NUMBER:	08740
SHEET NUMBER:	



2007 WAREHOUSE ADDITION





2009 LAB PACK BUILDING



WASTE ANALYSIS PLAN

**BADGER DISPOSAL OF WI., Inc.
MILWAUKEE, WISCONSIN**

Revised August 21, 2009

Section 5 SHIPMENT SCREENING

To comply with NR 664.0013(1), inbound waste materials will be screened to ensure the validity of the information supplied on the manifest.

The first step in the screening process occurs at the time of arrival of the waste material at the facility. The transporter of the materials is instructed to bring the manifest and any other paperwork associated with the load required by management or current regulations to the plant office. The manifest is logged and assigned a tracking number by the person in charge of manifest control. The manifest wording is validated to ensure that it meets regulatory requirements.

5.1 Containerized Loads

After the manifest has been validated and a tracking number assigned, the driver shall receive two copies of the manifest to take to the acting area supervisor. After receipt of the manifest(s), the supervisor instructs the driver where to position his box van or truck. Once positioned, the supervisor and/or one of the crew will off-load the containers, check to ensure that all labels are consistent with the manifests and verify the number of drums. Any damaged or incomplete label will be immediately rectified prior to final acceptance. Containers from each generator's waste stream(s) are randomly chosen for analysis and inspection. Exceptions to this analysis procedure are lab packs, containers of solid materials such as corrosive solids, filter press solids, cyanide solids, toxic solids, organic solids such as rags, contaminated soils and paint cans. All of these materials do receive a visual inspection. For these exceptions, the generator or broker will supply Badger Disposal with sufficient information on the Waste Profile Sheet form (WPS) (Appendix A) along with any additional information (Material Safety Data Sheet, analysis) to access its ultimate disposition.

For those materials that do not fall into the exception category a minimum of ten percent of the containers of each generator's waste stream(s) will be sampled and analyzed for compatibility, BTU's per pound, chloride, water, specific gravity and pH in an on-site laboratory. If the containers are accepted through this initial qualification step, they will then be moved to the container storage area and will be staged according to waste stream. Once the containers are off-loaded from the truck or box van, the driver will return to the plant office to receive a signed copy of the manifest. A copy of the manifest will also be sent to the

generator, as required. In addition, a comparison will be made against the pre-qualification and/or historical receipts of the material to ensure that there are no significant discrepancies between the load and what is expected. If the material meets acceptable criteria through inspection and/or analysis which consists of compatibility, BTU's per pound, %chlorine, water, pH and specific gravity results that match the Waste Profile sheet provided by the generator, the load be accepted and the material shall be segregated according to the ultimate method of processing.

If, after analysis, results are not representative of the manifest description, the General Manager is informed and the proper steps are taken to rectify the discrepancy. If the generator has an existing profile that matches the results, the material is received under the alternate profile. The generator is notified, a discrepancy is indicated on the manifest, a new drum label is placed on the drum/s and the drum/s are received under the alternate profile. If a profile that matches the analytical results does not exist, the generator is contacted to complete a new profile and the same discrepancy procedure is followed.

5.2 Bulk Liquid Loads

This process is similar to that of the containerized loads. A copy of the manifest and the driver log-in are brought to the plant office. A sample of the fuel blendable material is analyzed for BTU content, chloride, water, specific gravity, pH and any other analysis as deemed necessary by management. A comparison is made between the waste description on the manifest and the analytical results obtained to ensure that they are representative. In addition, a comparison may be made against the prequalification and/or historical receipts of the material to assure that there are no significant discrepancies between the load and what is expected. If acceptable, the material is assigned a spot to be off-loaded into a tank. When the material has been successfully off-loaded, the driver returns to the laboratory to pick up his log-in sheet, and takes it back to the plant office to receive his signed copy of the manifest. A copy of the manifest is also sent to the generator as required.

If, after analysis, results are not representative of the manifest description, the General Manager is informed and the proper steps are taken to rectify the discrepancy. If the generator has an existing profile that matches the results, the material is received under the alternate profile. The generator is notified, a discrepancy is indicated on the manifest and the load is received under the alternate profile. If a profile that matches the analytical results does not exist, the generator is contacted to complete a new profile and the same discrepancy procedure is followed.

5.3 Bulk Solid Loads

A copy of the manifest and driver log-in are brought to the plant office. A composite sample of the fuel blendable material is analyzed for BTU content, chloride, water, specific gravity, pH and any other analysis as deemed necessary by management. A comparison is made between the waste description on the manifest and the analytical results obtained to ensure that they are representative. In addition, a comparison may be made against the prequalification and/or historical receipts of the material to assure that there are no significant discrepancies between the load and what is expected. If acceptable, the material will be staged or off-loaded. When the material has been accepted or off-loaded, the driver returns to the office to pick up his log-in sheet, and takes it back to the plant office to receive his signed copy of the manifest. A copy of the manifest is also sent to the generator as required.

If, after analysis, results are not representative of the manifest description, the General Manager is informed and the proper steps are taken to rectify the discrepancy. If the generator has an existing profile that matches the results, the material is received under the alternate profile. The generator is notified, a discrepancy is indicated on the manifest and the load is received under the alternate profile. If a profile that matches the analytical results does not exist, the generator is contacted to complete a new profile and the same discrepancy procedure is followed.

5.4 Labpack Loads

After the manifest(s) has been validated and a tracking number assigned, the driver shall receive two copies of the manifest to take to the acting area Supervisor. After receipt of the manifest(s), the Supervisor shall instruct the driver where to position his box van or truck. Once positioned, the Supervisor and/or one of the crew shall off-load the containers, check to ensure that all labels are consistent with the manifest(s) and verify the number of containers. If the containers are accepted through this initial qualification step, they shall then be moved to the container storage area and shall be staged in the proper containment areas. Once the containers are off-loaded from the box van or truck, the driver shall return to the plant office to receive a signed copy of the manifest. A copy of the manifest shall also be sent to the generator, as required.

5.5 Polychlorinated Biphenyl Loads

After the manifest(s) has been validated and a tracking number assigned, the driver shall receive two copies of the manifest to take to the acting area Supervisor. After receipt of the manifest(s), the Supervisor shall instruct the driver where to position his box van or truck. Once positioned, the Supervisor and/or one of the crew shall off-load the containers, check to ensure that all labels are consistent with the manifest(s) and verify the number of containers. If the containers are accepted through this initial qualification step, they shall then be moved to the container storage area and shall be staged in the containment area designated for PCB storage. Once the containers are off-loaded from the box van or truck, the driver shall return to the plant office to receive a signed copy of the manifest. A copy of the manifest shall also be sent to the generator, as required.

PREPAREDNESS AND PREVENTION PLAN

**BADGER DISPOSAL OF WL, INC.
MILWAUKEE, WISCONSIN**

Revised August 21, 2009

- Daily visual inspections and routine preventative maintenance of all equipment aid in the prevention of potential runoff problems.
- Loading and unloading areas are paved and diked in a manner to preclude runoff from entering surface waters and groundwater.

Should a spill result in a short-term release that was outside of a contained area or paved area, immediate actions would be taken to stop the release. Any ponding material would be absorbed using on-site absorbent materials. The area of the spill would then be analyzed to determine the extent of contamination. Proper reporting would also be made to all appropriate agencies and the contaminated soil removed. All contaminated material would then be handled in accordance with all local, state and federal regulations. Further information on spill handling is contained in the SPCC Plan, as contained in Appendix C.

9.2 Containment Structures

The North Drum Storage Warehouse, 2007 Warehouse Addition and 2009 Lab Pack Building are designed with curbing at entrances to the buildings to minimize the risk of any accidental spillage leaving the confines of the buildings. The curbing, walls and floors of the buildings are designed to meet the requirements of WAC NR 664.0175, and are sufficiently level to ensure the integrity of the containment. There are no sewer discharges located in any operational or storage area of the storage/process or lab pack buildings.

The North Drum Storage Warehouse provides containment capacity of 16,743 gallons of liquid materials. An additional 10,670 gallons of containment capacity is available in the 2007 Warehouse Addition, and an additional 6,573 gallons of containment capacity is available in the 2009 Lab Pack Building. Appendix A contains calculations on the containment capacity.

Appendix A
CONTAINMENT AREA CALCULATIONS

CONTAINMENT SUMMARY FOR BADGER DISPOSAL FACILITY

PAGE	CONTAINMENT AREA	SHEET NUMBER	MAXIMUM VOL. STORED (GAL.)	MIN. CONTAINMENT REQ'D. BY RULE (GAL.)	CONTAINMENT CAPACITY (GAL.)
2,3,4	EXISTING NORTH DRUM STORAGE WAREHOUSE	(1)	6,000	6,000 (Tanker)	16,743 (3)
	CONTAINMENT AREA CALCULATIONS	(1)	39,600	3,960 (Drums)	16,743 (3)
5,6	2007 WAREHOUSE ADDITION DRUM STORAGE	(1)	27,060 (Sect. A)	2,706 (Drums)	5,387 (3)
	CONTAINMENT AREA CALCULATIONS	(1)	27,060 (Sect. B)	2,706 (Drums)	5,283 (3)
		(1)	6,000 (Sect. B)	6,000 (Tanker)	6,000 (w/o pallets)(3)
7,8	2009 LAB PACK BUILDING	(1)	18,975 (Sect. A)	1,898 (Drums)	6,573
	CONTAINMENT AREA CALCULATIONS				
9	TANK FARM BULK STORAGE CONTAINMENT	12 of 18	12,000	12,000	20,765
	AREA CALCULATIONS (3)			+ 25-year, 24-hour storm	
12	TANK FARM LOADING/UNLOADING PAD	12 of 18	(2)	(2)	1,591
	CONTAINMENT AREA CALCULATIONS (3)				
N/A	ROLL-OFF STORAGE	N/A	6-20 CY ROLL-OFFS	N/A	N/A

Notes:

(1) See Spectrum Engineering Drawing No. 05490-D1, dated 10/11/07, Drawing No. 05490-D2, dated 5-29-09, and attached Building Containment Calculations, dated 6/1/09.

(2) Existing Loading/Unloading Pad Containment is not adequate for largest compartment of tanker (6,000 gallons), without utilizing Bulk Storage Containment. Design of Loading/Unloading Pad Containment will need to be reviewed when bulk tank farm is installed.

(3) Badger Disposal uses containment pallets for separation of incompatible hazardous liquids only.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – NORTH DRUM STORAGE WAREHOUSE

CALCULATE BUILDING AREA

$$\begin{aligned}\text{AREA A} &= 63'-11" \times 31'-0" \\ A &= 1,981.4 \text{ s.f.}\end{aligned}$$

$$\begin{aligned}\text{AREA B} &= (77'-8" \times 73'-10") - E \\ B &= 5,734.4 \text{ s.f.} - 31.3 \text{ s.f.} \\ B &= 5,703.1 \text{ s.f.}\end{aligned}$$

$$\begin{aligned}\text{AREA C} &= (34'-0" \times 38'-4 \frac{1}{2}") - E \\ C &= 1,304.8 \text{ s.f.} - 31.3 \text{ s.f.} \\ C &= 1,273.5 \text{ s.f.}\end{aligned}$$

$$\begin{aligned}\text{AREA D} &= 15'-6" \times 5'-1 \frac{1}{2}" \\ D &= 79.4 \text{ s.f.}\end{aligned}$$

$$\begin{aligned}\text{AREA E} &= 7'-1" \times 4'-5" \\ E &= 31.3 \text{ s.f.}\end{aligned}$$

$$\begin{aligned}\text{Total Combined Area} &= A_{\text{TOT}} = A + B + C + D = 1,981.4 + 5,703.1 + 1,273.5 + 79.4 \\ A_{\text{TOT}} &= \mathbf{9,037.4 \text{ s.f.}}\end{aligned}$$

CALCULATE GROSS VOLUME OF BUILDING CONTAINMENT (EMPTY):

Containment curb and ramp heights vary. Per photos and site visit, lowest containment curbing is 3 ½" (worst case).

$$\text{Volume of empty containment} = V_E = A_{\text{TOT}} \times (3.5"/12")$$

$$V_E = 9,037.4 \text{ s.f.} \times 0.292 \text{ ft} = 2,636 \text{ c.f.}$$

$$V_E = 2,636 \text{ c.f.} \times 7.481 \text{ gal/c.f.}$$

$$V_E = \mathbf{19,719 \text{ gal.}}$$

DETERMINE DRUM CAPACITY:

Badger's hazardous waste license allows 720 drums of hazardous waste to be stored on containment pallets on the floor. In accordance with drawing 05490-D1, the capacity of the building is 860 drums on the floor and 1,720 drums double-stacked. The volume of the building containment (V_E), minus the drum volume on the floor (V_D), minus the volume of the containment pallets (V_C), must be greater than 10% of the hazardous waste drum capacity (720) or the largest container.

$$\mathbf{720 \text{ drums} \times 55 \text{ gal.} = 39,600 \text{ gal.}}$$

CALCULATE VOLUME REQUIRED:

In accordance with NR 664.0175 of *Subchapter I - Containers*, the containment shall have sufficient capacity to contain 10% of the volume of containers. Containers that do not contain hazardous waste with free liquids, or hazardous waste, do not need to be considered.

$$\text{Volume Required} = V_R = 720 \times 55 \text{ gal.} \times 0.10$$

$$V_R = \mathbf{3,960 \text{ gal.}}$$

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – NORTH DRUM STORAGE WAREHOUSE

CALCULATE VOLUME OF PALLETS:

Volume of Wooden Pallet = 11.2 gal.

$V_P = 11.2 \text{ gal.} \times \text{qty. of pallets}$

720 Hazardous waste drums \div 4 drums/pallet = 180 pallets

$V_P = 11.2 \text{ gal.} \times 180$

$V_P = 2,016 \text{ gal.}$

CALCULATE VOLUME OF DRUMS ON THE FLOOR:

Volume of Drums on floor (worst case) = $V_D = \pi r^2 h$

$V_D = \pi (1)^2 3.5' / 12 \times \text{qty. drums} = 0.9163 \text{ c.f.} \times 7.481 \text{ gal./c.f.} \times \text{qty. drums}$

$V_D = 6.85 \text{ gal.} \times \text{qty. drums}$

860 drum capacity - 720 hazardous waste drums on pallets = 140 Non-hazardous waste drums on the floor

$V_D = 6.85 \text{ gal./drum} \times 140 \text{ drums}$

$V_D = 959.7 \text{ gal.}$

CALCULATE NET VOLUME OF BUILDING CONTAINMENT (AT STORAGE CAPACITY):

Volume of Containment = $V_C = V_E - V_P - V_D$

$V_C = 19,719 \text{ gal.} - 2,016 \text{ gal.} - 960 \text{ gal.}$

$V_C = 16,743 \text{ gal.}$

COMPARE CONTAINMENT VOLUME (AT STORAGE CAPACITY) TO CONTAINMENT VOLUME REQUIRED:

1. Volume Required $V_R = 3,960 \text{ gal.} < V_C = 16,743 \text{ gal.}$, therefore, there is adequate containment capacity for hazardous waste drums.
2. Volume of containment pallets = 82 gal. for 8 drum capacity and 61 gal. for 6 drum capacity. In both cases, the containment pallet capacity exceeds 10% of the volume that can be stored on pallets. Therefore, there is adequate containment capacity for incompatible hazardous waste drums.
 $6 \text{ drums} \times 55\text{-gal./drum} = 330 \text{ gal.}$
 $61 \text{ gal. of containment} = 61/330 \times 100 = 18.5\%$
 $8 \text{ drums} \times 55\text{-gal./drum} = 440 \text{ gal.}$
 $82 \text{ gal. of containment} = 82/440 \times 100 = 18.6\%$
3. Volume of Tanker (V_T) is 6,000 gal. Volume of Containment (V_C) must be adequate for a full tanker inside the building. $V_T = 6,000 \text{ gal.} < V_C = 16,743 \text{ gal.}$, therefore, there is adequate containment capacity for a tanker loading inside the building.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – NORTH DRUM STORAGE WAREHOUSE

CONCLUSION:

Badger uses containment pallets for separation of incompatible hazardous liquids, which provide adequate secondary containment capacity for the containers stored on these pallets. Furthermore, the building also provides adequate secondary containment for both hazardous and non-hazardous liquid waste and for tanker unloading.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – 2007 WAREHOUSE ADDITION

CALCULATE BUILDING AREA

(Section A)

$$\text{AREA F} = (38'-8" \times 74'-1 \frac{1}{2}" - (8'-0" \times 2'-4 \frac{1}{2}" - (5'-0" \times 4'-8" - (6'-0" \times 1'-4 \frac{3}{4}"))$$

$$\text{F} = 2,866 \text{ s.f.} - 19 \text{ s.f.} - 23.3 \text{ s.f.} - 8.4 \text{ s.f.}$$

$$\text{F} = 2,815 \text{ s.f.}$$

(Section B)

$$\text{AREA G} = (38'-8" \times 74'-2 \frac{1}{2}" - (22'-0" \times 5'-2" - (6'-0" \times 1'-4 \frac{3}{4}"))$$

$$\text{G} = 2,869 \text{ s.f.} - 113.7 \text{ s.f.} - 8.4 \text{ s.f.}$$

$$\text{G} = 2,747 \text{ s.f.}$$

CALCULATE GROSS VOLUME OF BUILDING CONTAINMENT (EMPTY):

Containment curb and ramp heights vary slightly. Per a site visit, the lowest containment curbing appears to be 3 1/2" (worst case). (This was not verified with a level transit).

$$\text{Volume of empty containment} = V_E = A_{\text{TOT}} \times (3.5"/12")$$

$$V_E (\text{F}) = 2,815 \text{ s.f.} \times 0.292 \text{ ft} = 822 \text{ c.f.}$$

$$V_E (\text{F}) = 822 \text{ c.f.} \times 7.481 \text{ gal/c.f.}$$

$$V_E (\text{F}) = 6,149 \text{ gal.}$$

$$V_E (\text{G}) = 2,747 \text{ s.f.} \times 0.292 \text{ ft} = 802 \text{ c.f.}$$

$$V_E (\text{G}) = 802 \text{ c.f.} \times 7.481 \text{ gal/c.f.}$$

$$V_E (\text{G}) = 6,000 \text{ gal.}$$

DETERMINE DRUM CAPACITY:

Badger is allowed to store 492 drums of non-ignitable hazardous waste in the 2007 Warehouse Addition Section A (Calculation $V_E (\text{F})$ above), or, 492 drums of non-ignitable hazardous waste in Section B (Calculation $V_E (\text{G})$ above). Drums will be stored on containment pallets so that any leaks can be detected. The volume of the building containment (V_E), minus the wooden pallets (V_P), must be greater than 10% of the drum capacities (492 and 492) or the largest container.

$$\text{Section A (Calc F)} - (492 \text{ drums} \times 55 \text{ gal.}) = 27,060 \text{ gal.}$$

$$\text{Section B (Calc G)} - (492 \text{ drums} \times 55 \text{ gal.}) = 27,060 \text{ gal.}$$

CALCULATE VOLUME REQUIRED:

In accordance with NR 664.0175 of *Subchapter I - Containers*, the containment shall have sufficient capacity to contain 10% of the volume of containers. Containers that do not contain hazardous waste with free liquids, or hazardous waste, do not need to be considered.

$$\text{Volume Required} = V_R (\text{F}) = 492 \times 55 \text{ gal.} \times 0.10$$

$$V_R (\text{F}) = 2,706 \text{ gal.}$$

$$V_R (\text{G}) = 492 \times 55 \text{ gal.} \times 0.10$$

$$V_R (\text{G}) = 2,706 \text{ gal.}$$

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – 2007 WAREHOUSE ADDITION

CALCULATE VOLUME OF PALLETS:

Volume of Wooden Pallets = 11.2 gal.

$V_P (F) = 11.2 \text{ gal.} \times \text{qty. of pallets}$

$V_P (F) = 11.2 \text{ gal.} \times 68$

$V_P (F) = 762 \text{ gal.}$

$V_P (G) = 11.2 \text{ gal.} \times \text{qty. of pallets}$

$V_P (G) = 11.2 \text{ gal.} \times 64$

$V_P (G) = 717 \text{ gal.}$

CALCULATE NET VOLUME OF BUILDING CONTAINMENT (AT STORAGE CAPACITY):

Volume of Containment = $V_C = V_E - V_P$

$V_C (F) = 6,149 - 762 \text{ gal.}$

$V_C (F) = 5,387 \text{ gal.}$

$V_C (G) = 6,000 - 717 \text{ gal.}$

$V_C (G) = 5,283 \text{ gal.}$

COMPARE CONTAINMENT VOLUME (AT STORAGE CAPACITY) TO CONTAINMENT VOLUME REQUIRED:

1. Volume Required $V_R (F) = 2,706 \text{ gal.} < V_C (F) = 5,387 \text{ gal.}$, therefore, there is adequate containment capacity in Warehouse Addition Section A.
2. Volume Required $V_R (G) = 2,706 \text{ gal.} < V_C (G) = 5,283 \text{ gal.}$, therefore, there is adequate containment capacity in Warehouse Addition Section B.
3. Badger Disposal utilizes containment pallets for incompatible waste drum storage. These pallets are designed to provide a minimum of 10% of the total volume stored, without considering the additional containment capacity provided by the room.
4. Volume of Tanker (V_T) is 6,000 gal. Volume of Empty Containment in Warehouse Addition Section B (Calc. $V_e (G)$) must be adequate for a full tanker inside the building. $V_T = 6,000 \text{ gal.} = V_e (G) = 6,000 \text{ gal.}$, therefore, there is adequate containment capacity for a full tanker inside the building, as long as all pallets and drums within Warehouse Addition Section B are removed during tanker loading. If drums are left in place on pallets along the south side of Section B (9 of 16 pallets), the containment capacity would be reduced to 4,524 gal. ($6,000 \times 2,624 \times 9/16$). This would be adequate containment capacity for smaller tank trucks with 3,000 gal. compartments.

BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – 2009 LAB PACK BLDG.

CALCULATE BUILDING AREA

(Section A)

$$\begin{aligned}\text{AREA H} &= (36'-11\frac{1}{2}" \times 92'-0") - (11'-2" \times 22'-9") - (10'-0" \times 5'-0") - (9'-0" \times 7'-0") \\ &\quad - (11'-0" \times 3'-10") - (9'-0" \times 5'-6") - (6'-0" \times 2'-4") - (6'-0" \times 2'-5") - \\ &\quad (\frac{1}{2} \times 4'-0" \times 6'-3") - (\frac{1}{2} \times 2'-6" \times 9'-0") - (\frac{1}{2} \times 2'-6" \times 11'-0") - \\ &\quad (\frac{1}{2} \times 6'-0" \times 4'-0") - (\frac{1}{2} \times 6'-0" \times 3'-10") \\ H &= 3,400.2 \text{ s.f.} - 254 \text{ s.f.} - 50 \text{ s.f.} - 63 \text{ s.f.} - 42.2 \text{ s.f.} - 49.5 \text{ s.f.} \\ &\quad - 14 \text{ s.f.} - 14.5 \text{ s.f.} - 12.5 \text{ s.f.} - 11.3 \text{ s.f.} - 13.8 \text{ s.f.} - 12 \text{ s.f.} - \\ &\quad 11.5 \text{ s.f.} \\ H &= 2,851.9 \text{ s.f.}\end{aligned}$$

CALCULATE GROSS VOLUME OF BUILDING CONTAINMENT (EMPTY):

Containment curb and ramp heights vary slightly. Per a site visit, the lowest containment curbing appears to be 4" (worst case). (This was not verified with a transit).

Volume of empty containment = $V_E = A_{TOT} \times (4"/12")$

$$V_E (H) = 2,851.9 \text{ s.f.} \times 0.333 \text{ ft} = 950.6 \text{ c.f.}$$

$$V_E (H) = 950.6 \text{ c.f.} \times 7.481 \text{ gal/c.f.}$$

$$V_E (H) = 7,112 \text{ gal.}$$

DETERMINE DRUM CAPACITY:

Badger is allowed to store 384 drums of non-ignitable hazardous waste in the 2009 Lab Pack Building Section A (Calculation $V_E (H)$ above. Drums will be stored on standard wood pallets. The volume of the building containment (V_E), minus the wood pallets (V_P), must be greater than 10% of the drum capacities (384) or the largest container.

$$\text{Section A (Calc H)} - (345 \text{ drums} \times 55 \text{ gal.}) = 18,975 \text{ gal.}$$

CALCULATE VOLUME REQUIRED:

In accordance with NR 664.0175 of *Subchapter I - Containers*, the containment shall have sufficient capacity to contain 10% of the volume of containers. Containers that do not contain hazardous waste with free liquids, or hazardous waste, do not need to be considered.

$$\text{Volume Required} = V_R (H) = 384 \times 55 \text{ gal.} \times 0.10$$

$$V_R (H) = 1,898 \text{ gal.}$$

CALCULATE VOLUME OF PALLETS:

$$\text{Volume of Standard Wood Pallet} = 1.5 \text{ c.f.} = 11.2 \text{ gal.}$$

$$V_P (H) = 11.2 \text{ gal.} \times \text{qty. of pallets}$$

$$V_P (H) = 11.2 \text{ gal.} \times 48$$

$$V_P (H) = 539 \text{ gal.}$$

**BADGER DISPOSAL OF WI, INC.
BUILDING CONTAINMENT CALCULATIONS
CURRENT OPERATIONS – 2009 LAB PACK BLDG.**

CALCULATE NET VOLUME OF BUILDING CONTAINMENT (AT STORAGE CAPACITY):

$$\text{Volume of Containment} = V_C = V_E - V_P$$

$$V_C (H) = 7,112 - 539 \text{ gal.}$$

$$V_C (H) = 6,573 \text{ gal.}$$

**COMPARE CONTAINMENT VOLUME (AT STORAGE CAPACITY) TO CONTAINMENT
VOLUME REQUIRED:**

1. Volume Required $V_R (H) = 1,898 \text{ gal.} < V_C (H) = 6,573 \text{ gal.}$, therefore, there is adequate containment capacity in Warehouse Addition Section A.

Appendix C

**SPILL PREVENTION CONTROL AND
COUNTERMEASURE PLAN (SPCC PLAN)**

